

## V. Eligible Practices

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### *A. Cost-share Practices*

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## ***B. Resource Concerns***

### **1. Sheet and Rill/Gully Erosion**

Sheet and Rill/Gully Erosion need to be addressed to help stop potential land degradation and assist with water quality protection.

***Sheet and Rill Erosion:*** The unwanted removal of layers of soil from the land surface by the action of rainfall and runoff. It is the first stage of water erosion. Funds will be requested based on the total number of acres treated in the field.

***Gully Erosion:*** The process whereby the unwanted removal of soil is characterized by large incised channels in the landscape; severe erosion in which trenches are cut into the soil. These practices are measured by the number of actively eroding gully sites. Funds are requested based on the number of gullies treated.

### **2. Grazing Management**

Grazing management is used in pastureland where non-woody, permanent vegetative cover is established. The practices are designed to promote economically and environmentally sound agricultural land management on pastureland by demonstrating the best use of soil and water resources through the use of rotational grazing, the reduction or prevention of soil erosion, and water quality protection. Funds are requested based on the number of acres in the fields that will be improved with the grazing practice.

### **3. Irrigation Management**

Irrigation is the artificial application of water to land to assist in the production of crops. Irrigation management needs to be addressed to help protect water quality through efficient and uniformly applied water to control runoff, appropriate application of nutrients and chemicals, and conservation of water supplies. Funds are requested based on the number of acres in the field that will be addressed.

### **4. Animal Waste Management**

Animal waste management practices are designed to reduce or prevent degradation of the soil and water resources from animal waste runoff formed during intensive agricultural production. Such systems are planned to preclude discharge of pollutants to surface or groundwater and to recycle waste through correct soil application on agricultural land. Funds are requested based on the number of systems that need to be installed.

### **5. Nutrient and Pest Management**

Nutrient and pest management preserve and protect water quality by demonstrating the environmental and economic advantages of following a nutrient management or pest management plan. The practices provide cooperators an incentive to encourage the adoption of new management techniques and/or technologies for applying commercial fertilizer, pesticide or herbicide on agricultural land. When nutrients or chemicals in the soil (or applied to an area) are managed for their best and appropriate use, less nutrient and chemical runoff and leeching of the soil into streams occurs after a rainfall event. Funds are requested based on the number of acres that need a management plan applied.

6. **Sensitive Areas**

Sensitive areas are areas of agricultural land where current management has impacted erosion, surface water, and/or ground water, and improved land use practices can increase environmental quality. Practices in sensitive areas assist in the protection of water quality through buffers that collect and filter out sediment and other nutrients, herbicides, and pesticides that could run off of crop fields. The exclusion of livestock from streams protects the streambank from soil degradation and keeps animal waste out of streams, which prevents high nutrient and E. coli content. Funds are requested based on the number of acres that will be addressed within the field.

7. **Woodland Erosion**

Woodland erosion is the process that occurs when the removal of soil or vegetation (including trees), through animal presence or tree harvesting, allows soil to become susceptible to Sheet and Rill/Gully Erosion. Woodland erosion is addressed by excluding livestock from woodland areas, and by developing a plan for harvesting trees in an appropriate manner to protect soil integrity and water quality. Funds are requested to treat the number of woodland acres that need protection.

### ***C. Partner Funding***

1. **Maximum Funding**

Cost-share assistance may supplement federal cost-share funding for a practice only if combined federal and state funding does not exceed 75% of the estimated cost of the practice.

2. **Disclosure to Program Office**

The program office must be informed of intentions to partner prior to landowner discussions or contract submittal within MoSWIMS to ensure the partner program's intent, maintenance requirements, pricing structures, etc. are compatible. If cost-share is provided in conjunction with another program, the landowner must be informed the entire practice (including portions funded by another program) must be maintained in compliance with commission policy for the duration of the maintenance life as defined in the SWCP cost-share contract.

### ***D. Practices Across Property Lines***

1. **Written Agreement**

A practice may need to be located on or across property lines. The district may cost-share on the practice, provided a written agreement signed by all parties is filed with the district office before approving assistance. It is the cooperator's responsibility to draft the written agreement. It is highly recommended that district staff do not provide legal opinions or advice on the written agreement.

2. **Notarization**

***The written agreement needs to be notarized and include the following information:***

- a. The names of the cooperators involved.
- b. The proposed practice.

- c. The location of the practice and the involved area.
- d. Roles of the cooperators throughout the maintenance life of the practice.

### ***E. Reseeding***

1. Assistance for reseeded is only eligible to restore practices to NRCS standards and specifications that were originally cost-share practices through the state program.
2. Assistance is available for reseeded when, due to conditions beyond the cooperator's control, the seeding practice did not establish so as to perform its conservation function of controlling erosion. The DSL-15 No-Till Systems practice is excluded from this policy.
3. Fields contained in the original contract are only eligible to reseed once.
4. The board of supervisors may approve assistance to a new cooperator to reseed the practice.
5. The reseeded must be a new and separate contract with all other supporting documentation. The district must choose "Reseeding" from the Special Practice Description dropdown; and enter the practice's original contract number in the Original Contract(s) field. "Acres Served" is reported as zero since this was reported on a previous contract. A note should be placed in MoSWIMS to justify the reseeded.
6. Practices are considered established within one year of the original practice completion date. The cost-share for reseeded is based on the grouped component of Pasture Seeding, regardless of the original species planted. Documentation of the failed seeding must be contained in the district board meeting minutes within the one year time frame.
7. Assistance cannot be approved for lime and fertilizer components. Any nutrients must be applied at the cooperator's expense.
8. The maintenance lifespan of the practice starts when the payment is issued for the reseeded. If the cooperator violates the maintenance agreement on the practice, the amount of repayment is computed based upon the amount the cooperator received for the original contract payment and the amount received for the reseeded.

### ***F. Reconstruction***

1. If a storm event damages a practice while it is being constructed, the board may approve a change order to increase the extent approved for those components that sustained damage and must be replaced in order to meet NRCS standards and specifications within commission policy. A note must be entered in MoSWIMS to justify the reconstruction.
2. Reconstruction assistance is available for practices that failed during the maintenance life of the practice. Districts must request cost-share if a single storm event causes widespread failure of state cost-shared structural practices. The request must document the seriousness and the extent of the damage, along with estimates of costs for repairs. The request to provide assistance for reconstruction must be approved by

- the commission before the board approves the contract. The district must attach a copy of the approval letter to the Documents section of the MoSWIMS contract.
3. The board may not approve assistance for reconstruction for any component(s) that is not technically necessary to implement the practice to comply with current commission policies and NRCS standards and specifications. The cooperator is not entitled to assistance for components that were not cost-shared on as a part of the original practice.
  4. The reconstruction practice must be a new and separate contract with all other required supporting documentation. The district must choose “Reconstruction” from the Special Practice Description dropdown menu; and enter the original contract number in the Original Contract(s) field. “Acres Served” is reported as zero since this was reported on a previous contract.
  5. The maintenance lifespan of the practice starts when the payment is issued for the reconstruction. If the cooperator violates the maintenance agreement of the practice, the repayment amount is computed based on state cost-share funds received for the original contract payment and the amount received for reconstruction.

### ***G. Failed Spillway Pipe***

The district may add or replace failed spillway pipes on water impoundment reservoirs or sediment retention, erosion, or water control structures.

1. The structure in need of repair must have been constructed as a grade stabilization structure to control gully erosion, and not solely for livestock watering purposes. Cost-share is only available for structures not under a current maintenance agreement.
2. The structure must be rebuilt according to current NRCS standards and specifications within commission policies. The structure must have been originally designed and constructed to meet NRCS Standards and Specifications in place at the time of construction. The maintenance lifespan of the practice begins when the payment is issued for pipe replacement.
3. The eligible cost-share components for this practice are: principle spillway pipe, anti-seep collars, critical area seeding, and the earthwork to bring the structure up to current NRCS standards and specifications. Dredging of the structure to remove sediment is not an eligible cost-share component.
4. Fence and livestock watering facilities are not eligible components for this practice. A fence may be required to be installed at the cooperator’s expense to exclude livestock.
5. The pipe replacement practice must be a new and separate contract with all other required supporting documentation. The district must choose “Pipe Replacement” from the Special Practice Description dropdown; and enter the original contract number in the Original Contract(s) field. If the original contract number is not available, enter information that pertains to the funding source of the original contract. “Acres Served” is reported as zero since this was reported on a previous contract. A note must be placed in MoSWIMS to justify the pipe replacement.

## ***H. Adding Tile to Existing Sod Waterway or Terrace***

1. Cost-share is only available for structures not under a current maintenance agreement. The request to approve assistance for installation of tile in an existing waterway or terrace must be approved by the commission in writing before the board approves the contract.
2. Technical staff must certify that the existing waterway or terrace requires the addition of tile to preserve the practice, or the tile is necessary to control erosion. The request must document the seriousness and the technical need, along with estimates of costs for necessary components.
3. The eligible components for this practice are the required tile and trenching necessary for the structure to be in compliance with current NRCS standards and specifications. Any additional elements required for the practice to meet NRCS standards and specifications are at the cooperator's expense.
4. The completed waterway or terrace must be rebuilt according to current NRCS standards and specifications within commission policy. The maintenance lifespan of the practice begins when payment is issued for the tile installation.

## ***I. Animal Waste Systems***

1. **Permits**
  - a. Landowners are eligible to receive cost-share assistance on a waste management system, providing the Department of Natural Resources does not require a permit. Landowners are required by law to obtain a permit when 1,000 or more animal units occupy a site, or when site-specific conditions warrant a permit.
  - b. A waste management system falls under the National Pollution Discharge Elimination System (NPDES) law once a permit is issued. A permit is the incentive to properly handle generated waste. Once a permit is issued, only environmental problems not associated with the permit are eligible for cost-share.

## ***J. Soil Tests and Fertilizer***

1. **Soil Testing Laboratories**
  - a. The commission requires soil test analyses to be completed by a laboratory certified by the Missouri Soil Testing Association Accreditation Program. All lime and nutrient recommendations must be completed by the University of Missouri's Soil and Plant Testing Laboratory. Districts can obtain a list of approved soil testing laboratories from the local University Extension or FSA office.
  - b. The University of Missouri Extension program does NOT endorse any recommendations offered in conjunction with soil test results by a soil testing laboratory identified on the approved list.

### ***K. Chemical Application***

Chemicals used in carrying out practices shall be federally, state, and locally registered and must be applied strictly in accordance with authorized registered uses, directions on the label, and other federal or state policies and requirements.

### ***L. Cost-Share Practice Policies***

The following pages contain the commission's policies for the eligible, approved state cost-share practices.



## ***DSL-01 Permanent Vegetative Cover Establishment***

### **Purpose**

Reduce soil erosion and improve water quality.

### **Applicability**

Applies to lands to be established in permanent vegetative cover where forage production and/or conservation is feasible.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion. Erosion must be in excess of tolerable soil loss. Post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL  
PRE-INSTALL > T

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Forage and Biomass Planting (512) contained in the Field Office Technical Guide.

### **Policies**

1. On land where the slope exceeds 2 percent (2%), all cultural operations shall be performed on the contour, except where the district, in consultation with NRCS, determines this unnecessary.
2. Grazing must be delayed until the new seeding has attained good growth. Further grazing should be controlled throughout the season to ensure good growth before winter.
3. ***Cost-share is authorized for:***
  - a. Pasture Seeding. Permanent vegetative cover based on the Pasture Seeding component.
  - b. Lime. Assistance is limited to the minimum requirements to establish adequate cover to control erosion. Limestone shall be applied in accordance with minimum needs based on establishment recommendations, as determined by a soil test. For those test results that have an effective neutralizing material (ENM) requirement of less than 600 pounds per acre, the cooperator has the option to apply the requirement.
  - c. Fertilizer. Nutrient requirements shall be based on the minimum requirements for establishment of grass/forage. Fertilizer application according to a soil test may be waived if the individual nutrient requirement is less than 25 pounds per acre *and* the total application amount is less than 50 pounds per acre.
  - d. Preparation of a seedbed may consist of plowing, disking, or spring-toothed; or chemical methods in a no-till system of grass establishment. The cooperator may use any seedbed preparation method, but the assistance amount is based on the Pasture Seeding component.
  - e. Reseeding, under the conditions listed in section V, subsection F.

4. ***Cost-share is not authorized for:***

- a. Conversion from woodland or forest to pasture. Cost-share can not be provided for dozing or cutting of trees.
- b. Clearing of rocks or other obstructions from the area to be seeded.
- c. Fence.
- d. Nutrient build-up. Fertilizer application is to be consistent with one year's nutrient requirements for a four or eight year nutrient buildup plan.
- e. Nutrient application based on crop production goals rather than establishment recommendations.
- f. Vegetative cover that consists of only legumes.
- g. Land established in permanent vegetative cover under a maintenance agreement of any program.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage seeded to permanent vegetative cover.

**Extent Installed**

Acres.

**Maintenance Life**

5 years.

## ***DSL-02 Permanent Vegetative Cover Improvement***

### **Purpose**

Reduce soil erosion and improve water quality.

### **Applicability**

Applies to lands needing permanent vegetative cover improvement where forage production and/or conservation is desired and feasible.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion. Erosion must be in excess of tolerable soil loss. Post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL  
PRE-INSTALL > T

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Forage and Biomass Planting (512) and Prescribed Grazing (528) contained in the Field Office Technical Guide.

### **Policies**

1. Grazing must be delayed until the new seeding has attained good growth. Further grazing should be controlled throughout the season to ensure good growth before winter.
2. ***Cost-share is authorized for:***
  - a. Interseed Legumes. Permanent vegetative cover based on the Interseed Legumes component.
  - b. Lime. Assistance is limited to the minimum requirements to establish adequate cover to control erosion. Limestone shall be applied in accordance with minimum needs based on establishment recommendations, as determined by a soil test. For those test results that have an effective neutralizing material (ENM) requirement of less than 600 pounds per acre, the cooperator has the option to apply the requirement
  - c. Fertilizer. Nutrient requirements shall be based on the minimum requirements for establishment of grass/forage. Fertilizer application according to a soil test may be waived if the individual nutrient requirement is less than 25 pounds per acre *and* the total application amount is less than 50 pounds per acre.
  - d. Reseeding, under the conditions listed in section V, subsection F.
3. ***Cost-share is not authorized for:***
  - a. Measures which would constitute complete reestablishment of the cover.
  - b. Fence.
  - c. Nitrogen.

- d. Nutrient build-up. Fertilizer application is to be consistent with one year's nutrient requirements for a four or eight year nutrient buildup plan.
- e. Nutrient application based on crop production goals rather than establishment recommendations.
- f. Normal maintenance measures, such as annual top dressings with fertilizers or other mineral elements.
- g. Land established in permanent vegetative cover under a maintenance agreement of any program.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage seeded to improve vegetative cover.

**Extent Installed**

Acres

**Maintenance Life**

5 years.

## ***DSL-04 Terrace System***

### **Purpose**

Reduce soil erosion.

### **Applicability**

Applies to cropland where:

1. Soil erosion by water is a problem.
2. Soils and topography are such that terraces can be constructed and farmed with reasonable effort.
3. Excess runoff is a problem.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion or gully erosion. To qualify for this practice based on sheet and rill erosion, erosion rates must be in excess of tolerable soil loss; and post-installation erosion rates must be less than pre-installation erosion rates. To qualify for this practice based on gully erosion, post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL

PRE-INSTALL > T

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342) and Terrace (600) contained in the Field Office Technical Guide.

### **Policies**

1. A protective outlet or waterway installed solely as an outlet for the terrace system with no other conservation purpose should be entered under this practice. A protective outlet or waterway that solely solves a conservation problem and serves as an outlet for the terrace system should be cost-shared under the practice of DWP-01 Sediment Retention, Erosion, or Water Control Structures or DWP-03 Sod Waterway.
2. Farming operations must be parallel to terraces, with the exception of the Cherokee Prairie region of the state when the slope is 3% or less and the soil loss can be reduced to permissible soil loss (T). Farming over terraces may be allowed in the Cherokee Prairie region if it is acceptable to technical staff, and with board approval of the method of farming (should be determined on a case by case basis).
3. ***Cost-share is authorized for:***
  - a. Terraces and necessary leveling/filling to permit installation of an effective system.

- b. Removal of stone walls or hedgerows only when absolutely necessary to permit installation of an effective system.
- c. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
- d. Conversion of existing system, if not serving the intended conservation purpose.
- e. Topsoil, when required to meet NRCS standards and specifications.
- f. Reconstruction, under the conditions listed in section V, subsection G.

4. ***Cost-share is not authorized for:***

- a. Maintenance or conversion of an existing system to accommodate changes in cropping pattern or equipment.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage draining into the system.

**Extent Installed**

Linear Feet.

**Maintenance Life**

10 years.

## ***DSL-44 Terrace System with Tile***

### **Purpose**

Reduce soil erosion.

### **Applicability**

Applies to cropland where:

1. Soil erosion by water is a problem.
2. Soils and topography are such that terraces can be constructed and farmed with reasonable effort.
3. Suitable outlet can be provided.
4. Excess runoff is a problem.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion or gully erosion. To qualify based on sheet and rill erosion, erosion rates must be in excess of tolerable soil loss; and post-installation erosion rates must be less than pre-installation erosion rates. To qualify based on gully erosion, post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL

PRE-INSTALL > T

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Terrace (600), and Underground Outlet (620) contained in the Field Office Technical Guide.

### **Policies**

1. A protective outlet or waterway installed solely as an outlet for the terrace system with no other conservation purpose should be entered under this practice. A protective outlet or waterway that solely solves a conservation problem and serves as an outlet for the terrace system should be cost-shared under the practice of DWP-01 Sediment Retention, Erosion, or Water Control Structures or DWP-03 Sod Waterway.
2. Farming operations must be parallel to terraces, with the exception of the Cherokee Prairie region of the state when the slope is 3% or less and the soil loss can be reduced to permissible soil loss (T). Farming over terraces may be allowed in the Cherokee Prairie region if it is acceptable to technical staff, and with board approval of the method of farming (should be determined on a case by case basis).
3. ***Cost-share is authorized for:***
  - a. Terraces and necessary leveling/filling to permit installation of an effective system.

- b. Removal of stone walls or hedgerows only when absolutely necessary to permit installation of an effective system.
- c. Materials and installation of underground pipe outlets and other mechanical outlets.
- d. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
- e. Conversion of existing system, if not serving the intended conservation purpose.
- f. Topsoil, when required to meet NRCS standards and specifications.
- g. Reconstruction, under the conditions listed in section V, subsection G.

4. ***Cost-share is not authorized for:***

- a. Maintenance or conversion of an existing system to accommodate changes in cropping patterns or equipment use.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage draining into the system.

**Extent Installed**

Linear Feet.

**Maintenance Life**

10 years.



## ***N380 Windbreak/Shelterbelt Establishment***

### **Purpose**

1. Reduce soil erosion from wind.
2. Improve irrigation efficiency.

### **Applicability**

1. ***Limited to Butler, Scott, Stoddard, Mississippi, New Madrid, Dunklin, and Pemiscot counties.***
2. Applies to areas where linear plantings of woody plants are desired and suited for controlling wind erosion.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Windbreak/Shelterbelt Establishment (380), Tree/Shrub Site Preparation (490), and Tree/Shrub Establishment (612) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. A one time incentive per linear foot of established buffer length.

### **Maximum State Cost-Share**

Incentive can not exceed \$1.50 per linear foot of established buffer length.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage of tree/shrub plantation.

### **Extent Installed**

Linear Feet.

### **Maintenance Life**

10 years.

## ***DSL-15 No-Till System***

### **Purpose**

To support one or more of the following purposes:

1. Reduce sheet and rill erosion.
2. Reduce wind erosion.
3. Stop or reduce pollution from sediment and chemically contaminated runoff from agricultural nonpoint sources.

### **Applicability**

Applies to cropland where grain crops are planted.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion. Erosion must be in excess of tolerable soil loss. Post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL  
PRE-INSTALL > T

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Residue and Tillage Management No-Till (329) contained in the Field Office Technical Guide.

### **Policies**

1. The land involved must be protected by crop residue or temporary cover of at least 30% ground cover from the time of harvest until after the next crop is planted.
2. ***Cost-share is authorized for:***
  - a. A cooperator to receive an educational benefit from system implementation.
3. ***Cost-share is not authorized for:***
  - a. Producers who have utilized a no-till system.

### **Maximum State Cost-Share**

1. Assistance for this practice shall not be approved for a cooperator for more than two years, nor exceed 40 acres in any one year period. For purposes of this practice, the federal fiscal year, October 1 through September 30, will be used. Any assistance received by the cooperator from a federal program counts toward these limits.
2. Incentive can not exceed \$15 per acre, for a maximum of 40 acres in any one federal fiscal year. The maximum assistance that the cooperator can receive for this practice, in any one federal fiscal year, is \$600.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage no-tilled.

**Extent Installed**

Acres.

**Maintenance Life**

1 year.

## ***DSL-11 Permanent Vegetative Cover — Critical Area***

### **Purpose**

Where establishing permanent vegetation is needed on sites that have high erosion rates and/or conditions that prevent the establishment of vegetation with normal practices.

### **Applicability**

Applies to accomplish one or more of the following:

1. Stabilize areas with existing high rates of soil erosion by water or wind.
2. Rehabilitate and vegetate naturally degraded sites that cannot be stabilized through normal farming practices.
3. Erosion conditions that are a result of naturally-occurring erosion.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion or gully erosion. To qualify based on sheet and rill erosion, erosion rates must be in excess of tolerable soil loss; and post-installation erosion rates must be less than pre-installation erosion rates. To qualify based on gully erosion, post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL

PRE-INSTALL > T

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Fence (382), and Access Control (472) contained in the Field Office Technical Guide.

### **Policies**

1. The area must be protected from overgrazing.
2. When critical area treatment is used to address gully erosion problems associated with existing terrace systems located in pastures and hay lands, the following requirements apply:
  - a. Removal of terraces in pastures and/or hay lands to correct gully erosion limited almost entirely to outlets of terraces should be supported by a cost comparison.
  - b. Removal of the terrace system must be supported by visible sheet, rill and/or gully erosion within the pasture or hay land that can be directly attributed to ineffective terraces.
3. ***Cost-share is authorized for:***
  - a. Measures needed in pastures, hay lands, and field borders to stabilize a source of sediment, such as:

- 1) Grading and shaping.
  - 2) Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
  - 3) Trees or shrubs.
- b. Assistance to install components that will significantly reduce erosion and maintain or improve the quality of water in a stream, lake, pond, or other water sources.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage seeded.

**Extent Installed**

Acres.

**Maintenance Life**

5 years.

## ***DSL-111 Permanent Vegetative Cover — Critical Area: Confined Animal Feed Lot***

### **Purpose**

Where establishing permanent vegetation is needed on sites associated to animal confinement areas. The sites are expected to have high erosion rates and/or have conditions that prevent the establishment of vegetation with normal practices.

### **Applicability**

Applies to accomplish one or more of the following:

1. Stabilize areas with existing or expected high rates of soil erosion by water or wind.
2. Rehabilitate and vegetate degraded sites that cannot be stabilized through normal farming practices.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion or gully erosion. To qualify based on sheet and rill erosion, erosion rates must be in excess of tolerable soil loss; and post-installation erosion rates must be less than pre-installation erosion rates. To qualify based on gully erosion, post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL

PRE-INSTALL > T

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Fence (382), and Access Control (472) contained in the Field Office Technical Guide.

### **Policies**

1. The area must be protected from overgrazing.
2. ***Cost-share is authorized for:***
  - a. Erosion problems associated with animal confinement areas, feedlots, hog pens, and other areas where livestock has been confined or allowed continued access.
  - b. Measures needed in pastures, hay lands, and field borders to stabilize a source of sediment, such as:
    - 1) Grading and shaping.
    - 2) Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
    - 3) Trees or shrubs.

- c. Assistance to install components that will significantly reduce erosion and maintain or improve the quality of water in a stream, lake, pond, or other water sources.

#### **Maximum State Cost-Share**

1. Assistance is limited to 5 acres per area. Contiguous lots greater than 5 acres in size cannot be broken down into multiple 5 acre practices.
2. The maximum amount of cost-share that can be provided will be limited to \$500 per acre, with a maximum of \$2,500 for the practice.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

#### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

#### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

#### **Acres Served**

Acreage seeded.

#### **Extent Installed**

Acres.

#### **Maintenance Life**

10 years.

## ***DWC-01 Water Impoundment Reservoir***

### **Purpose**

Stabilize the grade and control gully erosion in natural or artificial channels.

### **Applicability**

Applies to agricultural land where the concentration and flow velocity of water requires a water impoundment reservoir to stabilize the grade in channels or to control gully erosion not contained in dense forest cover. For the purposes of this practice, CRP land surrounding the water impoundment reservoir site is considered agricultural land.

### **Erosion Requirements**

Practice is eligible for cost-share based on gully erosion. Post-installation erosion rates must be less than pre-installation erosion rates.

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Pond (378), Fence (382), Grade Stabilization Structure (410), Access Control (472), Pipeline (516), and Watering Facility (614) contained in the Field Office Technical Guide.

### **Policies**

#### ***1. Cost-share is authorized for:***

- a. Structures that provide erosion control benefits.
- b. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
- c. Installation of livestock watering facilities. Cost-share is limited to one livestock watering tank or hydrant, or a limited access watering point. A supply pipe may also be installed in addition to a limited access watering point. Cost-share is limited to 300 feet of pipe from the dam to the livestock watering facility.
- d. Exclusion fence to protect from livestock.
  - 1) Required if cost-share is authorized to install a livestock watering tank or hydrant.
  - 2) To qualify for cost-share, fence must be installed during construction. Fence installed any time during the maintenance life of the practice is the landowner's responsibility.
- e. Reconstruction, under the conditions listed in section V, subsection G.
- f. Replacement of failed spillway pipe, under the conditions listed in section V, subsection H.



g. Gully Repair in Emergency Spillway

- 1) If gully erosion is present at the emergency spillway and needs repaired to preserve the structure, the structure must be rebuilt according to NRCS standards and specifications. Cost-share is only eligible on structures not under a current maintenance agreement. The maintenance life of the practice starts when the payment is issued for the repair of the spillway.
- 2) The district can cost-share on components required to control the erosion in the emergency spillway. The district cannot cost-share to rebuild the water impoundment reservoir unless head cutting above the structure is causing measurable erosion.
- 3) The practice must be a new and separate contract with all other required supporting documentation. The district must ensure the Special Practice Description of “Reconstruction” is chosen from the dropdown and state the contract number of the original practice in the Original Contract(s) field. A note shall be placed in MoSWIMS to justify the reconstruction.

3. ***Cost-share is not authorized for:***

- a. Structures with an overall dam height of 25 feet or more in height, with a storage volume of at least 50 acre-feet of water. For purposes of this definition, the height of the dam is measured either from the natural bed of the stream or watercourse at the downstream toe of the barrier or dam or the lowest point on the downstream toe of the dam, whichever is lower, up to the lowest dam crest elevation. The storage volume is the amount of water stored in the reservoir below the dam crest elevation.
- b. Any reservoir for erosion control in forested areas, except for woody draws impacted by crop and pasture fields. Forested areas are defined in this policy, as shown on the latest available aerial map, as tree canopy completely covering the proposed pond site. Heavy clearing is not an approved component for this practice.
- c. Construction of a reservoir when agricultural activity does not surround the structure site.
- d. Any reservoir designed for aesthetic or recreational purposes.
- e. Any structure site cleared by the cooperator prior to eligibility approval.
- f. Any reservoir designed primarily for flood control or storm water retention.
- g. Pipelines or troughs to furnish water to farm buildings.

**Maximum State Cost-Share**

1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
2. The maximum assistance that can be paid for this practice is \$10,000.

**Map Requirements**

1. A CMT Map Number must be submitted for eligibility approval. The map must show the following information that pertains to the contract:
  - Farm perimeter
  - Dam

- Drainage Acres
  - Pool Area
2. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
    - Farm perimeter
    - Dam
    - Drainage Acres
    - Pool Area
    - Pipeline, including principle spillway pipe and waterline
    - Water Source
    - Watering Facility (Specify Tank or Hydrant)
    - Planned Fence
    - Any other features that may affect the contract.
  3. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage that drains into the structure.

**Extent Installed**

Cubic Yards.

**Maintenance Life**

10 years.

## ***DWP-01 Sediment Retention, Erosion, or Water Control Structure***

### **Purpose**

1. Reduce watercourse and gully erosion.
2. Trap sediment.
3. Reduce and manage onsite and downstream runoff.
4. Improve downstream water quality.

### **Applicability**

Applies to sites where:

1. Topography is generally irregular.
2. Sheet and rill erosion is controlled by other conservation practices.
3. Runoff and sediment damage land and improvements.
4. Adequate outlets can be provided.
5. Water and sediment control basins shall not be used in place of terraces.

### **Erosion Requirements**

Practice is eligible for cost-share based on gully erosion. Post-installation erosion rates must be less than pre-installation erosion rates.

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Fence (382), Grade Stabilization Structure (410), Access Control (472), and Water and Sediment Control Basin (638) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. Sediment detention or retention structures, such as erosion control dams, sediment basins, or similar structures.
  - b. Channel linings, chutes, drop spillways, drop pipes, and tile that dispose of excess water.
  - c. Exclusion fence.
  - d. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
  - e. Leveling and filling to permit the installation of the structure.
  - f. Measures that will contribute significantly to maintaining or improving soil or water quality.

- g. Drop pipes with a 12 foot top width, even when less is required by NRCS Standards and Specifications, if the board believes the width is needed to address safety concerns or if there is a potential to create an erosion problem with a lesser top width.
- h. Drop pipes that outlet into a channel controlled by a legal drainage district. Cost-share is limited to the top width of the embankment required by the legal drainage district or NRCS standards, whichever is greater.
- i. Either an elbow or a weir box, but not both.
- j. Reconstruction, under the conditions listed in section V, subsection G.
- k. Replacement of a failed spillway pipe, under the conditions listed in section V, subsection H.

2. ***Cost-share is not authorized for:***

- a. Irrigation structures that are part of a distribution system for irrigation water.
- b. Any structure built that stores water.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage that drains into the structure.

**Extent Installed**

Cubic Yards.

**Maintenance Life**

10 years.

## ***DWP-03 Sod Waterway***

### **Purpose**

1. To convey runoff from terraces, diversions, or other water concentrations without causing erosion or flooding.
2. To reduce gully erosion.
3. To protect/improve water quality.

### **Applicability**

Applies to agricultural land where added water conveyance capacity and vegetative protection are needed to control erosion resulting from concentrated runoff.

### **Erosion Requirements**

Practice is eligible for cost-share based on gully erosion. Post-installation erosion rates must be less than pre-installation erosion rates.

***Gully Erosion Checks:***            PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Grassed Waterways (412), and Lined Waterway or Outlet (468) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
  - b. Subsurface drains that are necessary for proper functioning of the waterway.
  - c. Berm (side dike) removal in accordance with the following guidelines:
    - 1) If the design criteria calls for berms over one foot (12 inches) in height, and this is clearly shown in the drawings and/or specifications, then the district may cost-share on the removal of the berm.
    - 2) Removal of the berm does not extend the maintenance lifespan of the original practice. The contract for construction of a sod waterway with berms that are greater than one (1) foot in height must list berm removal as a component of the practice. The contract should show the appropriate extent of earthwork approved for the berm removal that is technically necessary to meet NRCS standards and specifications. This component should show CS% of 0 on the original contract.
    - 3) The extent of earthwork approved on the contract for the removal of the berm cannot exceed the extent approved on the contract for construction of the waterway. Only the berm removal component is listed on the new contract. The board should not

approve the contract until the cooperator is ready to remove the berms. “Berm Removal” should be chosen from the Special Practice Desc. dropdown, and the original contract number should be typed in the Original Contract(s) field of the cost-share contract. Acres served should be reported as 0. A note must be entered in MoSWIMS to justify the reconstruction.

- d. Reseeding, under the conditions listed in of section V, subsection F.
- e. Reconstruction, under the conditions listed in of section V, subsection G.

2. ***Cost-share is not authorized for:***

- a. State cost-share is not eligible for berm removal on waterways cost-shared on by federal programs.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage that drains into the waterway.

**Extent Installed**

Acres of waterway installed.

**Maintenance Life**

10 years.

## ***DSL-05    Diversion***

### **Purpose**

1. Break up concentrations of water on long slopes, on undulating land surfaces, and on land that is generally considered too flat or irregular for terracing.
2. Protect terrace systems by diverting water from the top terrace where topography, land use, or land ownership prevents terracing the land above.
3. Intercept surface and shallow subsurface flow.
4. Reduce runoff damages from upland runoff.
5. Divert water away from active gullies or critically eroding areas.

### **Applicability**

Applies to agricultural land where surface runoff water control and/or management is needed. It also applies where soils and topography are such that the diversion can be constructed and suitable outlet is available or can be provided. Diversion shall not be substituted for terraces on land requiring terracing for erosion control.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion or gully erosion. To qualify based on sheet and rill erosion, erosion rates must be in excess of tolerable soil loss; and post-installation erosion rates must be less than pre-installation erosion rates. To qualify based on gully erosion, post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL

PRE-INSTALL > T

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Dam Diversion (348), Diversion (362), Pond (378), Grade Stabilization Structure (410), Subsurface Drains (606), and Underground Outlet (620) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. Diversions, ditches, dikes or subsurface drains where necessary for the proper functioning of the diversion.
  - b. Leveling and filling to install an effective system.

- c. Removing portions of stone walls or hedgerows, if necessary, to permit establishment of the practice. To avoid losses to wildlife habitat, stonewalls and hedgerows will be removed only when absolutely necessary for the successful completion of the practice.
- d. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
- e. A protective outlet or waterway installed solely as an outlet for a diversion system and serves no other conservation purpose as a component of this practice. A protective outlet or waterway which, by itself, solves a conservation problem and also serves as an outlet for a diversion system should be cost-shared under the practice DWP-01 Sediment Retention, Erosion, or Water Control Structure or DWP-03 Sod Waterway.

**2. *Cost-share is not authorized for:***

- a. Ditches or dikes designed to impound water or part of a regular irrigation system.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage that drains into the structure.

**Extent Installed**

Linear Feet.

**Maintenance Life**

10 years.



## **N332      *Contour Buffer Strips***

### **Purpose**

1. Reduce sheet and rill erosion.
2. Reduce transport of sediment and other water-borne contaminants down slope, on site, and off site.

### **Applicability**

Applies to cropland.

### **Erosion Requirements**

Practice is eligible for cost-share based on sheet and rill erosion. Erosion must be in excess of tolerable soil loss. Post-installation erosion rates must be less than pre-installation erosion rates.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL > POST-INSTALL  
PRE-INSTALL > T

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Contour Buffer Strips (332).

### **Policies**

1. Field borders are required in conjunction with this practice.
2. ***Cost-share is authorized for:***
  - a. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
  - b. A one time out of production incentive.
3. ***Cost-share is not authorized for:***
  - a. Use on undulating to rolling topography.

### **Maximum State Cost-Share**

1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost.
2. Incentive can not exceed \$800.00 per acre planted.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the

practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage draining into the contour buffer strips.

**Extent Installed**

Acres.

**Maintenance Life**

5 years.

## **N585      *Contour Stripcropping***

### **Purpose**

To support one or more of the following:

1. Reduce sheet and rill erosion.
2. Reduce transport of sediment and other water-borne contaminants.

### **Applicability**

Applies to cropland.

### **Erosion Requirements**

Practice is eligible for cost-share based sheet and rill erosion. Pre-installation erosion rates must be less than or equal to tolerable soil loss.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL < OR = T

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Contour Stripcropping (585).

### **Policies**

1. Assistance is authorized for this practice only on lands with sheet and rill erosion equal to or less than the “T” value.
2. Incentive for the acreage affected by the practice.

### **Maximum State Cost-Share**

Incentive can not exceed \$15.00 per acre for each year established.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage planted.

### **Extent Installed**

Acres.

### **Maintenance Life**

1 year.

## ***DSP-02 Permanent Vegetative Cover Enhancement***

### **Purpose**

1. Reduce soil erosion and improve water quality.
2. Improve the productive cover of existing pastureland with the demonstration of no-till, inter-seeding of legumes by the use of no-till drills; to protect the soil and prevent the pollution of air, land or water from agricultural uses.

### **Applicability**

1. Applies to pastureland and hay land only where non-woody, permanent vegetative cover is in poor or very poor condition, with less than thirty percent (30%) introduced legumes, to be improved to good condition; or to fescue pastureland in better than poor condition with less than thirty percent (30%) introduced legumes and where fescue-endophyte fungus infestation levels are greater than thirty percent (30%) and less than seventy percent (70%). The argument has been made that during certain times of the year, a particular fescue stand will show lower levels of endophyte infestation than what is actually present. The board, with the help of University Extension, should make every effort to inform the cooperator of the proper method and timing of taking the endophyte test. The purpose of the endophyte test is to determine the level of infestation. The test should not be taken just to qualify for cost-share.
2. In the case of fescue eligibility, the percent legume in the fescue pasture must be less than thirty percent (30%). Lespedeza is excluded from the measurement. The fescue-endophyte infestation level must be greater than thirty percent (30%) and less than seventy percent (70%) as determined by a proper endophyte test. Refer to NRCS Technical Note No. 17.
3. For purposes of this practice, poor pasture condition shall include “poor” and “very poor,” with numeric values of 20 or less as determined by the use of the JS-Agron 24.

### **Erosion Requirements**

Practice is eligible for cost-share based sheet and rill erosion. Pre-installation erosion rates must be less than or equal to tolerable soil loss.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL < OR = T

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Forage and Biomass Planting (512), Prescribed Grazing (528), and Vegetative Establishment Herbaceous Seeding (723) contained in the Field Office Technical Guide.

### **Policies**

1. Haying is permitted to manage and maintain the legume when grazing alone does not control grass and weed growth.

2. ***Cost-share is authorized for:***

- a. Limestone and fertilizer. Assistance is limited to the minimum requirements based on legume establishment recommendations, as determined by a soil test. Cost-share for limestone may be approved for the amount needed up to a maximum of 1,500 pounds effective neutralizing material (ENM). Any amount over 1,500 pounds of ENM is the cooperator's responsibility. For those tests which have an ENM requirement of less than 600 pounds per acre, the cooperator has the option of applying the requirement.
- b. Interseed Legumes. Permanent vegetative cover based on the DSP-02 Interseed Legumes component.
- c. Reseeding, under the conditions listed in section V, subsection F, for a maximum of 80 acres.

3. ***Cost-share is not authorized for:***

- a. Measures which would constitute complete re-establishment of existing cover.
- b. Nitrogen.
- c. Nutrient application based on crop production goals rather than establishment recommendations.
- d. Nutrient build-up. Fertilizer application is to be consistent with one year's nutrient requirements for a four or eight year nutrient buildup plan.
- e. Chemicals.
- f. Broadcast or aerial sowing of legume seed.
- g. Woody or rocky fields where a no-till drill would not perform adequately.
- h. Fields where woody vegetation has been cleared and no improvements or maintenance of soil cover has since been performed.
- i. Land already established in permanent vegetative cover which is under the maintenance agreement of any program.
- j. Fields with pre-install erosion rates above "T."
- k. Harvest of grass or legume seed.

**Maximum State Cost-Share**

- 1. Assistance can not exceed 160 acres per cooperator for all farms owned by that cooperator. If the land changes ownership, the new owner would be eligible to receive cost-share for the practice provided the land qualifies and the new owner has not previously met the cost-share maximum for the practice. It is the board's responsibility to see that the commission's intent that no more than 160 acres of DSP-02 is demonstrated per cooperator.
- 2. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
- 3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage seeded.

**Extent Installed**

Acres.

**Maintenance Life**

5 years.

### ***DSP 3.1     Grazing System Water Development***

#### **Purpose**

1. Improve or maintain desired species composition and vigor of plant community.
2. Improve or maintain surface and/or subsurface water quality and quantity.
3. Improve or maintain riparian and watershed function.
4. Reduce accelerated soil erosion and maintain or improve soil condition.

#### **Applicability**

Applies to pastureland where permanent vegetative cover is established and can be enhanced through the use of a planned grazing system. The system operator must follow an approved grazing system plan. The system operator must attend an approved grazing school provided by University of Missouri, in conjunction with NRCS, prior to the district's submittal of a contract for review.

#### **Erosion Requirements**

Practice has no erosion requirements.

#### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Pond (378), Fence (382), Access Control (472), Prescribed Grazing (528), and Water Well (642) contained in the Field Office Technical Guide.

#### **Policies**

1. Cooperators must have an approved grazing plan prior to contract board approval.
  - a. A system may be approved for land where livestock do not currently graze; however, the district must verify that the system is in use for or by livestock within the first year after meeting the Prescribed Grazing (528) standard and specifications.
  - b. After a grazing plan is developed, grazing practices may be installed independently of one another to work towards its implementation.
    - 1) Cost-share payments will be authorized as each practice is completed, according to NRCS standards and specifications within the grazing plan.
  - c. The entire grazing system must meet the standard and specifications for Prescribed Grazing (528) within three years after payment of the first contract or the entire amount of cost-share received must be repaid. The district should give funding priority to cooperators working toward the Prescribed Grazing (528) standard and specifications.
  - d. The size and number of paddocks will be determined by the grazing system plan, which must be designed for appropriate grazing height and rest periods as listed in the NRCS "Grazing Management Guidelines." The planner and district should encourage the cooperator to develop an effective system that meets the program's and cooperator's

objectives, and enables the cooperator to stay in compliance. There is no time limit for adding to existing systems.

2. ***Wells***

- a. It is not required that wells constructed under this practice be utilized solely for livestock watering.
- b. All new wells must be registered according to state requirements.

3. ***Cost-share is authorized for:***

- a. Water source development (well or pond) for a planned grazing system.
- b. The least cost alternative, based on the size and type of water source needed. Consideration must be given to existing water sources. If a water source exists, documentation explaining further development of the current source or need for another source of water must be entered in MoSWIMS.
- c. Pond and well construction for all newly approved grazing systems, in addition to existing systems that meet NRCS standards and specifications for Prescribed Grazing, (528). Construction of a water source will only be allowed on an existing system if paddock numbers are increased or if acreage is added so that the existing water source is no longer adequate.
- d. Pond reconstruction if deemed the least cost alternative.
- e. Well reconstruction if deemed the least cost alternative.
- f. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

**Maximum State Cost-Share**

1. Assistance is limited to 75% of the established county cost, not to exceed the state average cost.
2. Maximum of \$95.00 per acre. The acres to be considered for the maximum will be the acreage within the paddocks served by the water source.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

**Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Acreage Completed under DSP 3.4 and/or DSP 3.5
  - Location of Power Source
  - System Acreage
  - Field Numbers (use the “Point” tool)
  - Any other feature that may affect the completed system.



- a. Planned items must be shown and labeled with the fiscal year to be installed.
    - Planned Fence
    - Planned Pipeline
    - Planned Water Source
    - Planned Watering Facility (Specify Tank or Hydrant)
    - Planned Lime Application
    - Planned Seeding Application
  - b. Existing items must be labeled with the fiscal year installed and funding source (EQIP, SWCP, etc.).
    - Existing Fence, including existing perimeter and cross fences
    - Existing Pipeline
    - Existing Water Source
    - Existing Watering Facility (Specify Tank or Hydrant)
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage within the paddocks where water is delivered that did not previously contain an adequate water source, excluding heavily forested acreage.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***DSP 3.2     Grazing System Water Distribution***

### **Purpose**

1. Improve or maintain desired species composition and vigor of plant community.
2. Improve or maintain surface and/or subsurface water quality and quantity.
3. Improve or maintain riparian and watershed function.
4. Reduce accelerated soil erosion and maintain or improve soil condition.

### **Applicability**

Applies to pastureland where permanent vegetative cover is established and can be enhanced through the use of a planned grazing system. The system operator must follow an approved grazing system plan. The system operator must attend an approved grazing school provided by University of Missouri, in conjunction with NRCS, prior to the district's submittal of a contract for review.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Pipeline (516), Prescribed Grazing (528), Stream Crossing (578), and Watering Facility (614) contained in the Field Office Technical Guide.

### **Policies**

1. Cooperators must have an approved grazing plan prior to contract board approval.
  - a. A system may be approved for land where livestock do not currently graze; however, the district must verify that the system is in use for or by livestock within the first year after meeting the Prescribed Grazing (528) standard and specifications.
  - b. After a grazing plan is developed, grazing practices may be installed independently of one another to work towards its implementation.
    - 1) Cost-share payments will be authorized as each practice is completed, according to NRCS standards and specifications within the grazing plan.
  - c. The entire grazing system must meet the standard and specifications for Prescribed Grazing (528) within three years after payment of the first contract or the entire amount of cost-share received must be repaid. The district should give funding priority to cooperators working toward the Prescribed Grazing (528) standard and specifications.
  - d. The size and number of paddocks will be determined by the grazing system plan, which must be designed for appropriate grazing height and rest periods as listed in the NRCS "Grazing Management Guidelines." The planner and district should encourage the cooperator to develop an effective system that meets the program's and cooperator's

objectives, and enables the cooperator to stay in compliance. There is no time limit for adding to existing systems.

2. All losing streams and streams that have a perennial pool or permanent flow that lie within paddocks served by a water source through a DSP 3.2 must be fenced to exclude livestock.
  - a. When properly designed and installed, the operator may limit access to the excluded area for “flash” grazing if specific, brief time periods are defined in the grazing plan.
  - b. Streams may be fenced out with the DSP 3.3 for any paddock within the grazing system not receiving funding for water distribution to provide for water quality protection.
3. The following applies to fencing and providing additional water to paddocks. Enter documentation into MoSWIMS as appropriate.
  - a. Water may be provided where a paddock is subdivided or acreage is added to create a new paddock without a water source.
  - b. Additional livestock watering facilities may not be added to paddocks where a water source exists.
  - c. Livestock watering facilities may not be added to paddocks where a pond was excluded using N472 and no subdivision of the paddock is planned.
  - d. A livestock watering facility may be provided in a paddock where a fenced pond has never been utilized for watering and the cooperator has utilized water in an adjacent field.
4. ***Cost-share is authorized for:***
  - a. Components needed to install pipeline and a water distribution point(s) for livestock watering from a water source.
  - b. All newly approved grazing systems and existing systems (systems that meet NRCS Standards and Specifications for Prescribed Grazing, Code 528).
    - 1) Watering facilities are allowed in an existing system if paddock numbers are increased or acreage is added. An exception is if water is to be distributed to paddocks that previously did not contain a water source (such as systems that involve moving livestock through lanes/paddocks to a central water source). Justification must be entered into MoSWIMS.
    - 2) One watering facility may be installed per paddock.
5. ***Cost-share is not authorized for:***
  - a. Pipeline and/or components that serve lots, building, or areas outside of the grazing system.
  - b. Livestock watering facilities added to paddocks where a pond was excluded using N472 and no subdivision of the paddock is planned.
  - c. Watering facilities to be enhanced or added to paddocks that currently contain an adequate watering facility. An exception would be if a pond/spring cannot provide water for the duration of the grazing period designated in the grazing plan. Justification must be entered in MoSWIMS.

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the established county cost, not to exceed the state average cost.
2. Maximum of \$85.00 per acre. The acres to be considered for the maximum will be the acreage within the paddocks served by the water distribution system.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

### **Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Acreage Completed under DSP 3.4 and/or DSP 3.5
  - Location of Power Source
  - System Acreage
  - Field Numbers (use the “Point” tool)
  - Any other feature that may affect the completed system.
  - a. Planned items must be shown and labeled with the fiscal year to be installed.
    - Planned Fence
    - Planned Pipeline
    - Planned Water Source
    - Planned Watering Facility (Specify Tank or Hydrant)
    - Planned Lime Application
    - Planned Seeding Application
  - b. Existing items must be labeled with the fiscal year installed and funding source (EQIP, SWCP, etc.).
    - Existing Fence, including existing perimeter and cross fences
    - Existing Pipeline
    - Existing Water Source
    - Existing Watering Facility (Specify Tank or Hydrant)
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage within the paddocks where water is delivered that did not previously contain an adequate water source, excluding heavily forested acreage.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

### ***DSP 3.3      Grazing System Fence***

#### **Purpose**

1. Improve or maintain desired species composition and vigor of plant community.
2. Improve or maintain surface and/or subsurface water quality and quantity.
3. Improve or maintain riparian and watershed function.
4. Reduce accelerated soil erosion and maintain or improve soil condition.

#### **Applicability**

Applies to pastureland where permanent vegetative cover is established and can be enhanced through the use of a planned grazing system. The system operator must follow an approved grazing system plan. The system operator must attend an approved grazing school provided by University of Missouri, in conjunction with NRCS, prior to the district's submittal of a contract for review.

#### **Erosion Requirements**

Practice has no erosion requirements.

#### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Fence (382) and Prescribed Grazing (528) contained in the Field Office Technical Guide.

#### **Policies**

1. Cooperators must have an approved grazing plan prior to contract board approval.
  - a. A system may be approved for land where livestock do not currently graze; however, the district must verify that the system is in use for or by livestock within the first year after meeting the Prescribed Grazing (528) standard and specifications.
  - b. After a grazing plan is developed, grazing practices may be installed independently of one another to work towards its implementation.
    - 1) Cost-share payments will be authorized as each practice is completed, according to NRCS standards and specifications within the grazing plan.
  - c. The entire grazing system must meet the standard and specifications for Prescribed Grazing (528) within three years after payment of the first contract or the entire amount of cost-share received must be repaid. The district should give funding priority to cooperators working toward the Prescribed Grazing (528) standard and specifications.
  - d. The size and number of paddocks will be determined by the grazing system plan, which must be designed for appropriate grazing height and rest periods as listed in the NRCS "Grazing Management Guidelines." The planner and district should encourage the cooperator to develop an effective system that meets the program's and cooperator's

objectives, and enables the cooperator to stay in compliance. There is no time limit for adding to existing systems.

2. All losing streams and streams that have a perennial pool or permanent flow that lie within paddocks served by a water source through a DSP 3.2 must be fenced to exclude livestock.
  - a. When properly designed and installed, the operator may limit access to the excluded area for “flash” grazing if specific, brief time periods are defined in the grazing plan.
  - b. Streams may be fenced out with the DSP 3.3 for any paddock within the grazing system receiving funding for water distribution to provide for water quality protection.
3. The following applies to fencing and providing additional water to paddocks. Enter documentation into MoSWIMS as appropriate.
  - a. Water may be provided where a paddock is subdivided or acreage is added to create a new paddock without a water source.
  - b. Additional livestock watering facilities may not be added to paddocks where a water source exists.
  - c. Livestock watering facilities may not be added to paddocks where a pond was excluded using N472 and no subdivision of the paddock is planned.
  - d. A livestock watering facility may be provided in a paddock where a fenced pond has never been utilized for watering and the cooperator has utilized water in an adjacent field.
4. ***Cost-share is authorized for:***
  - a. Deterrent fence to create or intensify a grazing system where livestock graze on both sides of the installed fence in accordance with the grazing plan.
    - 1) Construction of fence on an existing system if paddock numbers are increased or acreage is added.
    - 2) Cost-share on the least cost wire component. If the board of supervisors determines that fence other than high tensile electric is the minimum necessary for system, then cost-share can be provided to install other types of deterrent fence. The board’s justification must be properly documented in MoSWIMS as a General note type.
    - 3) The number of strands of wire allowed must be appropriate for the livestock species in the grazing system. Additional strands may be added at a later date if the species changes or for allowance of co-grazing. Fence must meet Standards and Specifications for deterrent of species as listed in the NRCS *Wire Height and Spacing* table.

### ***Wire Height & Spacing***

Fence type	Livestock type	Purpose	Min Number of Wires	Height of Top Wire	Suggested Wire Spacing
Barbed Wire (12.5 gauge standard; 12.5 gauge, 2 strand, twisted, barbless; or 15.5 gauge high tensile)	Cattle	Containment	4	48"	12,12,12,12
		Deterrent	4	48"	12,12,12,12
	Sheep/Goats	Containment	6	48"	6,6,6,8,10,12
		Deterrent	5	36"	6,6,6,8,10
	Horses	Containment	4	48"	12,12,12,12
		Deterrent	4	48"	12,12,12,12
Woven wire (Conventional -- top & bottom strands 12.5 gauge with 14.5 wire for intermediate strands with verticals every 4 – 12") (High tensile - all 12.5 gauge high tensile wire with verticals every 6 – 24")	Cattle	Containment	39" woven + 1 barb or HTE	48"	4(woven), 5
			32" woven + 2 barbs or HTE	48"	4(woven) 6,6
	Sheep/Goats	Containment	39" woven + 1 barb or HTE	48"	2(woven) 7
			36" woven + 2 barbs or HTE	48"	2(woven) 2,8
			32" woven + 2 barbs or HTE	48"	2(woven) 6,8
		Deterrent	36" woven	36"	0-2"



			32" woven + 1 barb or HTE	36"	0-2"(woven) 4
	Horses	Containment	39" woven + 1 barb or HTE	48"	4(woven) 5
		Deterrent	32" woven + 1 barb or HTE	42"	4(woven) 6
Permanent Electric (12.5 gauge high tensile, 12.5 gauge vinyl coated, or 16 gauge multi-strand braided cable)	Cattle	Containment Deterrent	2	36-48"	18-24", 18-24"
			1	26-36"	26-36"
	Sheep/Goats	Containment Deterrent	5	38-40"	6-8,6-8,8,8,8,8-10
			3	30-32"	8-10, 10, 10-12
	Horses	Containment	3	48"	24,12,12
		Deterrent	2	40-44"	24,16-18

5. ***Cost-share is not authorized for:***

- Property line/perimeter fence.
- Fence that cannot be grazed on both sides. The only exception is fence along a stream within a paddock.
- Fence around crop fields.
- Fence to create paddocks within dense woodlands.

- e. Fence along roads/lanes utilized to access a residence.
- f. Fence along crop fields that are mechanically harvested.
- g. Fence to exclude a pond. Utilize the N472 Use Exclusion practice to exclude an existing pond.

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the established county cost, not to exceed the state average cost.
2. Maximum of \$60.00 per acre. The acres to be considered for the maximum will be the acreage of paddocks where new fence is installed.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

### **Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Acreage Completed under DSP 3.4 and/or DSP 3.5
  - Location of Power Source
  - System Acreage
  - Field Numbers (use the “Point” tool)
  - Any other feature that may affect the completed system.
  - a. Planned items must be shown and labeled with the fiscal year to be installed.
    - Planned Fence
    - Planned Pipeline
    - Planned Water Source
    - Planned Watering Facility (Specify Tank or Hydrant)
    - Planned Lime Application
    - Planned Seeding Application
  - b. Existing items must be labeled with the fiscal year installed and funding source (EQIP, SWCP, etc.).
    - Existing Fence, including existing perimeter and cross fences
    - Existing Pipeline
    - Existing Water Source
    - Existing Watering Facility (Specify Tank or Hydrant)
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage within the paddocks where fence is installed, excluding heavily forested acreage.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***DSP 3.4     Grazing System Lime***

### **Purpose**

1. Improve or maintain desired species composition and vigor of plant community.
2. Improve or maintain surface and/or subsurface water quality and quantity.
3. Improve or maintain riparian and watershed function.
4. Reduce accelerated soil erosion and maintain or improve soil condition.

### **Applicability**

Applies to pastureland where permanent vegetative cover is established and can be enhanced through the use of a planned grazing system. The system operator must follow an approved grazing system plan. The system operator must attend an approved grazing school provided by University of Missouri, in conjunction with NRCS, prior to the district's submittal of a contract for review.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Prescribed Grazing (528), and Nutrient Management (590) or Waste Utilization (633) contained in the Field Office Technical Guide.

### **Policies**

1. Cooperators must have an approved grazing plan prior to contract board approval.
2. ***Cost-share is authorized for:***
  - a. Lime application on existing systems that meet NRCS standard and specifications for Prescribed Grazing (528).
  - b. One time application of lime in accordance with minimum cover improvement needed, as determined by a soil test.
    - 1) If determination is made that requires application of greater than 1500 lbs of ENM per acre, the cooperator is required to apply a minimum of 1500 lbs of ENM per acre. Cost-share may be provided for more than 1500 lbs of ENM, not to exceed the maximum of \$50.00 per acre.
    - 2) If lime is applied in split application when large amounts of ENM are required, the contract must remain unpaid until all lime is applied.
3. ***Cost-share is not authorized for:***
  - a. Lime, if N590 Nutrient Management was previously completed

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the established county cost, not to exceed the state average cost.
2. Maximum of \$50.00 per acre for a one time application of limestone and in accordance to the soil test recommendations for a planned grazing system.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

### **Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Acreage Completed under DSP 3.4 and/or DSP 3.5
  - Location of Power Source
  - System Acreage
  - Field Numbers (use the “Point” tool)
  - Any other feature that may affect the completed system.
  - a. Planned items must be shown and labeled with the fiscal year to be installed.
    - Planned Fence
    - Planned Pipeline
    - Planned Water Source
    - Planned Watering Facility (Specify Tank or Hydrant)
    - Planned Lime Application
    - Planned Seeding Application
  - b. Existing items must be labeled with the fiscal year installed and funding source (EQIP, SWCP, etc.).
    - Existing Fence, including existing perimeter and cross fences
    - Existing Pipeline
    - Existing Water Source
    - Existing Watering Facility (Specify Tank or Hydrant)
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage treated with lime, excluding heavily forested acreage.

**Extent Installed**

Acres.

**Maintenance Life**

5 years.

## ***DSP 3.5     Grazing System Seed***

### **Purpose**

1. Improve or maintain desired species composition and vigor of plant community.
2. Improve or maintain surface and/or subsurface water quality and quantity.
3. Improve or maintain riparian and watershed function.
4. Reduce accelerated soil erosion and maintain or improve soil condition.

### **Applicability**

Applies to pastureland where permanent vegetative cover is established and can be enhanced through the use of a planned grazing system. The system operator must follow an approved grazing system plan. The system operator must attend an approved grazing school provided by University of Missouri, in conjunction with NRCS, prior to the district's submittal of a contract for review.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Forage and Biomass Planting (512) and Prescribed Grazing (528) contained in the Field Office Technical Guide.

### **Policies**

1. *Cost-share is authorized for:*
  - a. Interseed Legumes. Permanent vegetative cover based on the Interseed Legumes component.

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the established county cost, not to exceed the state average cost.
2. Maximum of \$40.00 per acre a one time inter-seeding of legumes for a grazing system.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

### **Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Acreage Completed under DSP 3.4 and/or DSP 3.5

- Location of Power Source
  - System Acreage
  - Field Numbers (use the “Point” tool)
  - Any other feature that may affect the completed system.
- a. Planned items must be shown and labeled with the fiscal year to be installed.
    - Planned Fence
    - Planned Pipeline
    - Planned Water Source
    - Planned Watering Facility (Specify Tank or Hydrant)
    - Planned Lime Application
    - Planned Seeding Application
  - b. Existing items must be labeled with the fiscal year installed and funding source (EQIP, SWCP, etc.).
    - Existing Fence, including existing perimeter and cross fences
    - Existing Pipeline
    - Existing Water Source
    - Existing Watering Facility (Specify Tank or Hydrant)
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage seeded, excluding heavily forested acreage.

### **Extent Installed**

Acres.

### **Maintenance Life**

5 years.



## ***N430      Irrigation Water Conveyance***

### **Purpose**

Prevent erosion or loss of water quality or damage to the land, to make possible proper management of irrigation water, and reduce water conveyance losses.

### **Applicability**

1. All pipelines shall be planned and located to serve as an integral part of an irrigation water distribution or conveyance system designed to facilitate the conservation use and management of the soil and water resources.
2. Water supplies, water quality, and rates of irrigation delivery for the area served by the pipeline shall be sufficient to make irrigation practical for the crops to be grown and the irrigation water application method to be used.
3. Areas must be suitable for irrigation with quantity of water available.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Irrigation Water Conveyance (430) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. System components including underground pipeline, trenching and backfill, outlets, check valves, pressure-relief valves, air-release valves, joints and connections.

### **Maximum State Cost-Share**

1. Up to 75% cost-share for fields that have been irrigated at least three of the last five years.
2. Up to 50% cost-share for fields that have not been irrigated at least three of the last five years.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage served by underground pipe.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## **N442      *Irrigation System, Sprinkler***

### **Purpose**

1. Efficiently and uniformly apply irrigation water to maintain adequate soil water for the desired level of plant growth and production without causing excessive water loss, erosion, or water quality impairment.
2. Applying chemicals, nutrients, and/or waste water.

### **Applicability**

The sprinkler method of water application is suited to most crops, irrigable lands, and climatic conditions where irrigated agriculture is feasible. Areas must be suitable for irrigation or sprinkler water application and have an adequate supply of suitable quality water or other liquid as appropriate, available for the intended purpose(s). Soils and topography shall be suitable for the irrigation of the planned crop.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Irrigation System Sprinkler (442) and Irrigation Water Management (449) contained in the Field Office Technical Guide.

### **Policies**

1. Cooperators must have an irrigation water management plan.
2. ***Cost-share is authorized for:***
  - a. Replacement of existing sprinklers or nozzles with those that increase system efficiency.
  - b. Fields that have been irrigated at least three of the last five years.

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
2. A limit of four pivots is allowed per cooperator and/or farm.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage irrigated by the system.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***N443      Irrigation System, Surface and Subsurface***

### **Purpose**

1. Efficiently convey and distribute irrigation water to the surface point of application without causing excessive water loss, erosion, or water quality impairment.
2. Efficiently convey and distribute irrigation water to the subsurface point of application without causing excessive water loss or water quality impairment.
3. Apply chemicals and/or nutrients as part of an irrigation system (secondary benefit).

### **Applicability**

Areas must be suitable for irrigation with water of suitable quality for the purpose intended. Water supplies must be sufficient in quantity and quality to make irrigation practical for the crops to be grown and the application methods to be used.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Irrigation System Surface and Subsurface (443) and Irrigation Water Management (449).

### **Policies**

1. Cooperators must have an irrigation water management plan.
2. ***Cost-share is authorized for:***
  - a. Surge valves and/or improved water distribution pads for furrow irrigation systems.
  - b. Establishment of a side-inlet flood irrigation system.
  - c. Only fields that have been irrigated at least three of the last five years.

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
2. Lay Flat Tubing is a one time cost-share payment, not to exceed 75% cost-share up to \$3.00/acre, and up to 80 acres.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage irrigated by the system.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***N447      Irrigation System, Tail Water Recovery***

### **Purpose**

1. Conserve irrigation water supplies.
2. Improve water quality by collecting water from field surface.

### **Applicability**

Applies to lands that are served by a properly designed and installed irrigation system where recoverable irrigation runoff and/or rainfall runoff flows can be anticipated under current or expected management practices.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Irrigation System Tailwater Recovery (447) contained in the Field Office Technical Guide.

### **Policies**

1. *Cost-share is authorized for:*
  - a. Installation of pipeline and appurtenances, water control structures, earthen reservoirs or delivery system, pumps, and pump stations.
  - b. Fields that have been irrigated at least three of the last five years.

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
2. The maximum assistance that can be paid for the practice is \$25,000.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage irrigated by the system.

**Extent Installed**

Each.

**Maintenance Life**

10 years



## ***N554      Drainage Water Management***

### **Purpose**

1. Reduce nutrient, pathogen, and/or pesticide loading from drainage systems into downstream receiving waters.
2. Reduce wind erosion.

### **Applicability**

Practice applies:

1. To farm lands where drainage is required for increased utilization of nutrients applied.
2. Where soil contains enough depth and permeability to allow installation of an effective and economically feasible system.
3. Where installation and operation of a water control structure will not impact adjacent fields or drainage systems.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Drainage Water Management (554), Structure for Water Control (587) and Subsurface Drain (606) contained in the Field Office Technical Guide.

### **Policies**

1. The cooperator must be able to show crop history for three of the last five years.
2. The cooperator must keep records to verify adherence to a nutrient management plan, pest management plan, and water management plan for the duration of the maintenance life of the practice.
3. The effect of drainage systems on wetlands should be evaluated and documented by the USDA Wetland Conservation Certification form "AD-1026."
4. ***Cost-share is authorized for:***
  - a. The cost of main and lateral line materials; installation of main and lateral lines; and pipes and appurtenances. Assistance should not exceed 75% of \$350 per acre.
  - b. In addition, assistance is allowed on Water Control Structures and their installment at 75% of county average cost.
  - c. Cost-share is also authorized at 75% for piping, animal guards and trenching/backfill as separate components. These should **ONLY** be used for components that are needed to run pipe from the water control structure to the outlet point.

5. *Cost-share is not authorized for:*

- a. Land leveling or reshaping of the surface of land.
- b. Costs incurred to develop or implement an irrigation water management plan.
- c. Costs incurred to develop or implement a nutrient management plan. The cooperator can receive incentives through the N590 Nutrient Management practice.
- d. Costs incurred to develop or implement a pest management plan. The cooperator can receive incentives through the N595 Pest Management practice.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage managed by the water level control structure.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***N587      Structure for Water Control***

### **Purpose**

Practice may be applied as a management component of a water management system to control the stage, discharge, distribution, delivery or direction of water flow. Decrease nutrient and chemical loading to downstream surface waters through proper retention of water on agricultural lands.

### **Applicability**

Applies wherever a permanent structure is needed as an integral part of a water control system to serve one or more of the following functions:

1. Convey water from one elevation to a lower elevation within, to, or from a water conveyance system such as a ditch, channel, canal or pipeline designed to operate under open channel conditions (typical structures: drops, chutes, turnouts, surface water inlets, head gates, pump boxes, and stilling basins).
2. Control the elevation of water in drainage or irrigation ditches (typical structures: checks, flashboard risers, and check dams).
3. Control the division or measurement of irrigation water (typical structures: division boxes and water measurement devices).

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Structure for Water Control (587) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. Pipe materials, weir boxes added to existing grade stabilization structures, and permanent pads.
2. ***Cost-share is not authorized for:***
  - a. Head cut control.
  - b. Grade stabilization.

### **Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage drained.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***N312 Beef Waste Management***

### **Purpose**

Manage waste from agricultural production in a manner that prevents or minimizes degradation of soil and water resources. Such systems are planned to preclude discharge of pollutants to surface or ground water and to recycle waste through correct soil application to agricultural land.

### **Applicability**

Practice applies where:

1. Wastes generated may pose a threat to land and water resources.
2. Soil, water, and plant resources are adequate to properly manage the waste.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Waste Storage Facility (313), Critical Area Planting (342), Roofs and Covers (367), and Nutrient Management (590) contained in the Field Office Technical Guide.

### **Policies**

1. The intent of this practice is to store animal waste. Therefore, a signed “N312 Operation and Maintenance Statement” (which can be found in the Appendix) must be completed prior to the contract’s board approval. Only contracts for lagoons are exempt from the form requirement.
2. All nutrients applied must be in accordance to the Nutrient Management (590) standard.
3. Design plans must be submitted in MoSWIMS as a “Supporting Documentation” type of document with contract approval.
4. ***Cost-share is authorized for:***
  - a. 75% cost-share for:
    - 1) Floor space utilized to store dry waste from paved feedlot.
    - 2) Roof to cover dry storage area. The square footage of the roofing must equal the square footage of floor space, as specified above.
    - 3) Wall necessary to enclose dry storage area.
    - 4) Collection gutter or basin from feedlot to storage area.
  - b. 50% cost-share for:
    - 1) Winter feeding stations (area of floor that is utilized to collect waste in feeding and travel areas).

- c. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

5. ***Cost-share is not authorized for:***

- a. Permitted animal waste systems, under the conditions listed in section V, subsection J.
- b. Any components of the animal waste system above the minimum and necessary for the number of animals at the time of application.
- c. Isolated structures not considered a component of a waste management system.
- d. Bedding and bunk feeding areas, including roof.
- e. Costs incurred to develop or implement a comprehensive nutrient management plan.
- f. Mobile agitation, pumping, and related equipment.

**Maximum State Cost-Share**

- 1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
- 2. Not to exceed \$25,000 per cooperator.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Animal Units.

**Maintenance Life**

10 years.

## ***N312 Dairy Waste Management***

### **Purpose**

Manage waste from agricultural production in a manner that prevents or minimizes degradation of soil and water resources. Such systems are planned to preclude discharge of pollutants to surface or ground water and to recycle waste through correct soil application to agricultural land.

### **Applicability**

Practice applies where:

1. Wastes generated may pose a threat to land and water resources.
2. Soil, water, and plant resources are adequate to properly manage the waste.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Waste Storage Facility (313), Critical Area Planting (342), Waste Treatment Lagoon (359), Roofs and Covers (367), Pumping Plant (533), and Nutrient Management (590) contained in the Field Office Technical Guide.

### **Policies**

1. The intent of this practice is to store animal waste. Therefore, a signed “N312 Operation and Maintenance Statement” (which can be found in the Appendix) must be completed prior to contract board approval. Contracts for lagoons only are exempt from the form requirement.
2. All nutrients applied must be in accordance to the Nutrient Management (590) standard.
3. Design plans must be submitted in MoSWIMS as a “Supporting Documentation” type of document with contract approval.
4. ***Cost-share is authorized for:***
  - a. 75% cost-share for:
    - 1) Flush tanks.
    - 2) Conveyance of waste to treatment area (such as reception tank, gutter or storage tank).
    - 3) Waste storage tank and/or pond.
    - 4) Solids separator.
    - 5) Solids storage area, including roof.
  - b. 50% cost-share for:
    - 1) Area of the floor utilized for collection of waste in feeding and travel areas.

- 2) Roof and gutter covering travel areas. The square footage of the roofing must equal the square footage of floor space, as specified above.
- c. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

5. ***Cost-share is not authorized for:***

- a. Permitted animal waste systems, under the conditions listed in section V, subsection J.
- b. Bedding and bunk feeding areas, including roof.
- c. Any components of the animal waste system above the minimum and necessary for the number of animal units at the time of the contract.
- d. Irrigation systems, spreading equipment, and other components required for field application.
- e. Costs incurred to develop or implement a comprehensive nutrient management plan.
- f. Mobile agitation, pumping, and related equipment.

**Maximum State Cost-Share**

- 1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
- 2. Not to exceed \$50,000 per cooperator.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Animal Units.

**Maintenance Life**

10 years.



## ***N312 Poultry Waste Management***

### **Purpose**

Manage waste from agricultural production in a manner that prevents or minimizes degradation of soil and water resources. Such systems are planned to preclude discharge of pollutants to surface or ground water and to recycle waste through correct soil application to agricultural land.

### **Applicability**

Practice applies where:

1. Wastes generated may pose a threat to land and water resources.
2. Soil, water, and plant resources are adequate to properly manage the waste.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Waste Storage Facility (313), Animal Mortality Facility (316), Critical Area Planting (342), Roofs and Covers (367), and Nutrient Management (590) contained in the Field Office Technical Guide.

### **Policies**

1. The intent of this practice is to store animal waste. Therefore, a signed “N312 Operation and Maintenance Statement” (which can be found in the Appendix) must be completed prior to the contract’s board approval. Only contracts for lagoons are exempt from the form requirement.
2. All nutrients applied must be in accordance to the Nutrient Management (590) standard.
3. Design plans must be submitted in MoSWIMS as a “Supporting Documentation” type of document with contract approval.
4. ***Cost-share is authorized for:***
  - a. 75% cost-share for:
    - 1) Floor space utilized to store dry waste.
    - 2) Roof to cover dry storage area. The square footage of the roofing must equal the square footage of floor space, as specified above.
    - 3) Wall necessary to enclose dry storage area.
    - 4) Loading ramp.
  - b. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

5. ***Cost-share is not authorized for:***

- a. Permitted animal waste systems, under the conditions listed in section V, subsection J.
- b. Any components of the animal waste system above the minimum and necessary for the number of animals at the time of application.
- c. Floor area utilized for anything other than dry waste storage, based on current animal units.
- d. Clean bedding storage (such as sawdust, wood chips, etc.).
- e. Waste facility or “high-rise” house for layers.
- f. Costs incurred to develop or implement a comprehensive nutrient management plan.
- g. Mobile agitation, pumping, and related equipment.
- h. Composter. Cost-share is authorized under 317 Composting Facility.

**Maximum State Cost-Share**

- 1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
- 2. Not to exceed \$25,000 per cooperator.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Animal Units.

**Maintenance Life**

10 years.

## ***N312 Swine Waste Management***

### **Purpose**

Manage waste from agricultural production in a manner that prevents or minimizes degradation of soil and water resources. Such systems are planned to preclude discharge of pollutants to surface or ground water and to recycle waste through correct soil application to agricultural land.

### **Applicability**

Practice applies where:

1. Wastes generated may pose a threat to land and water resources.
2. Soil, water, and plant resources are adequate to properly manage the waste.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Waste Storage Facility (313), Waste Treatment Lagoon (359), Critical Area Planting (342), Roofs and Covers (367), Pumping Plant (533), and Nutrient Management (590) contained in the Field Office Technical Guide.

### **Policies**

1. The intent of this practice is to store animal waste. Therefore, a signed “N312 Operation and Maintenance Statement” must be completed prior to the contract’s board approval. Only contracts for lagoons are exempt from this requirement.
2. All nutrients applied must be in accordance to the Nutrient Management (590) standard.
3. Design plans must be submitted in MoSWIMS as a “Supporting Documentation” type of document with contract approval.
4. ***Cost-share is authorized for:***
  - a. 75% cost-share for:
    - 1) Flush tanks.
    - 2) Conveyance of waste to treatment area (such as reception tank, gutter, or storage tank).
    - 3) Solids separator.
    - 4) Solids separation basin.
    - 5) Solids storage area, including roof.
    - 6) Waste storage pond and/or lagoon.
    - 7) Pit storage and underground collection associated with farrowing, growing, gestation, feeding, finishing, or nursery buildings.

- b. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

5. ***Cost-share is not authorized for:***

- a. Permitted animal waste systems, under the conditions listed in section V, subsection J.
- b. System elements utilized for anything other than treatment, storage, and collection of animal waste.
- c. Any components of the animal waste system above the minimum and necessary for the number of animal units at the time of application.
- d. Irrigation systems, spreading equipment, or field application components.
- e. Slatted floors.
- f. Costs incurred to develop or implement a comprehensive nutrient management plan.
- g. Mobile agitation, pumping, and related equipment.

**Maximum State Cost-Share**

- 1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
- 2. Not to exceed \$50,000 per cooperator.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Animal Units.

**Maintenance Life**

10 years.

## ***N316 Incinerator***

### **Purpose**

To incinerate livestock and poultry carcasses as part of a waste management system to decrease nonpoint source pollution of surface and groundwater resources.

### **Applicability**

Practice applies where:

1. Animal carcass disposal must be addressed as part of a waste management system for the operation, only dead animals maybe incinerated any other type of waste is NOT allowed.
2. On-farm treatment and disposal is permitted by federal, state, and local laws.
3. A Waste Management Plan has been developed.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Animal Mortality Facility (316) contained in the Field Office Technical Guide.

### **Policies**

1. Minimum capacity of the incinerator shall be based on the average daily weight of animal mortality and the expected death loss of the largest animals of the operation. Incinerators should not be designed for catastrophic death losses.
2. Design plans must be submitted in MoSWIMS as a “Supporting Documentation” type of document with contract approval.
3. ***Cost-share is authorized for:***
  - a. Permitted animal waste systems, under the conditions listed in section V, subsection J.
  - b. Assistance is authorized for the cost of the incinerator based on the capacity determined necessary.
4. ***Cost-share is not authorized for:***
  - a. Roof.
  - b. Fuel storage.
  - c. Fuel/electric hookup.
  - d. Payment in conjunction with an N317 Composting Facility.

### **Maximum State Cost-Share**

1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

2. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums and policies.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Each.

**Maintenance Life**

10 years.

## ***N317 Composting Facility***

### **Purpose**

1. To treat waste organic material biologically by producing a humus-like material that can be recycled as a soil amendment and fertilizer substitute or otherwise utilized in compliance with all laws, rules and regulations.
2. Waste organic material for composting may include livestock and poultry manure, dead animal carcasses, and food processing wastes where feed is processed as part of normal farming operations.
3. Reduce the pollution potential of agricultural wastes to surface and ground water.

### **Applicability**

Practice applies where:

1. Organic waste material is generated by agricultural production or processing.
2. Composting facility is a component of a planned agricultural waste management system.
3. Composting is needed to manage the waste organic material properly.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Composting Facility (317), Roofs and Covers (367), Critical Area Planting (342), and Nutrient Management (590) contained in the Field Office Technical Guide.

### **Policies**

1. All nutrients applied must be in accordance to the Nutrient Management (590) standard.
2. Design plans must be submitted in MoSWIMS as a “Supporting Documentation” type of document with contract approval.
3. ***Cost-share is authorized for:***
  - a. Permitted animal waste systems, under the conditions listed in section V, subsection J.
  - b. Grading/shaping necessary to divert surface runoff from outside areas around the compost facility.
  - c. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
4. ***Cost-share is not authorized for:***
  - a. Payment in conjunction with an N316 Incinerator.

**Maximum State Cost-Share**

1. Assistance is limited to 75% of the county average cost, not to exceed the state average cost.
2. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums and policies.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Each.

**Maintenance Life**

10 years.



## ***N590 Nutrient Management***

### **Purpose**

1. Demonstrate the environmental and economic advantages of following a nutrient management plan.
2. Provide operators an incentive to encourage the adoption of new management techniques and/or technologies for applying manure and fertilizer. The definition of operator for the purpose of this practice is any individual farming the land, that has incurred the expenses for the nutrients applied. The operator's name should also be listed on file with FSA as the operator of such land. The contract must contain the name of the legal owner. If an operator is participating, the landowner must complete a "Operator Authorization" form.

### **Applicability**

Applies to lands where plant nutrients (commercial fertilizers and/or manure) have been improperly applied and the landowner is utilizing a new approach in the application of nutrients. **The land must be eroding at or below the tolerable soil loss level.**

### **Erosion Requirements**

Practice is eligible for cost-share based sheet and rill erosion. Pre-installation erosion rates must be less than or equal to tolerable soil loss.

***Sheet & Rill Erosion Checks:*** PRE-INSTALL < OR = T

### **Specifications**

1. The completed practice must meet the NRCS Standards and Specifications for Nutrient Management (590) contained in the Field Office Technical Guide.
2. Items for Contract Payment
  - a. Copies of soil test reports from a MSTA-certified soil testing laboratory, including nutrient recommendations and where those recommendations originated.
  - b. Receipts (fertilizer, lime) indicating the quantity and blending analysis of the fertilizer purchased. The corresponding field numbers must be shown on the receipts.
  - c. Records showing harvest date, yield and any sources of nutrients that will credit or deduct from the nutrient balance (hay feeding, legume crop or cover crop) for the applicable season.
  - d. Copies of the Field Nutrient Balance report generated from Manure Management Planner (MMP) shall be scanned and attached to the contract payment. A copy shall be distributed to landowners with the copy of the contract payment.
  - e. A completed dated, nutrient management plan that documents the safe and effective application of nutrients for crop/hay/forage production.

## **Policies**

1. Contracts must be board approved between January 1 -April 15, prior to application of any nutrients. The Nutrient Management plan must be developed prior to the application of nutrients. Contract payments can be issued after October 31 or after the crop is harvested, whichever date is later.
  - a. **Example 1:** If a contract for cropland is approved on April 1 the contract payment cannot be approved until November 1 of that year. If the nutrients have been applied and yield records for that growing season are complete the operator is eligible for contract payment. Proper documentation is required.
  - b. **Example 2:** If a contract for cropland is approved on April 1 and the crop is harvested on December 15<sup>th</sup>, the landowner would be eligible for payment after December 15<sup>th</sup> allowing crop nutrient withdrawals to be accounted for in the nutrient balances. Proper documentation is required.
2. All recommendations must be based on realistic yield goals. Realistic yield goals shall be based on the following criteria:
  - a. Actual yield data collected from the field for five (5) or more years. Ignore highest and lowest years and calculate the mean of the remaining three. Add 10 percent to the mean yield to allow for potential to improve yield.
  - b. Crop yield estimates from county soil survey adjusted by soil-based crop productivity indices.
  - c. County average yield data collected by the National Agricultural Statistics Service.
3. The complete nutrient management plan must be developed to cover the life of the soil test (four years) prior to the operator signing the initial cost-share contract. The soil test used to develop the plan must be less than 2 years old. The nutrient management plan must be developed based on soil test phosphorus levels, not phosphorus index. The plan must be updated to reflect alternate crops planted and to illustrate the actual withdrawals for the crop/hay/forage produced.
4. Soil test analysis for nutrient status must be performed by a Missouri Soil Testing Association (MSTA) approved laboratory. A current list of approved laboratories may be found at <http://soilplantlab.missouri.edu/soil/mstacertified/htm>.
5. The nutrient applications for each year must be within 10 pounds per acre of the nutrient plan recommendations for N, P, and K. Unutilized P and K is not factored into a nutrient management plan the first year. Yield goals and recommendations can be adjusted to meet economic situations of a landowner, however the plan must be adjusted accordingly in the planning for the next year and nutrient balances must be reflected accordingly.
  - a. **Example:** If a landowner reviews the plan based on soil tests and is not comfortable applying the recommended 120-60-60 then yield goals can be adjusted to reduce the recommended N, P, and K to meet his/her economic situation. All nutrients (N,P,K) should be reduced proportionately when establishing realistic reduced yield goals based upon the landowner's economic situation. (ie.. Reduce the yield goal on a forage crop from 4 tons per acre to 2 tons per acre.)

6. Nutrient credits from all sources (hay feeding, previous legume crops, etc.) shall be included in the nutrient budget and shall be deducted from amounts of nutrient required.
7. Nitrogen application rates for cool season grasses may be applied at 75% of soil test recommendations.
8. Fertilizer application, according to the nutrient management plan, may be waived if the following criteria are met. Individual nutrient requirement is less than 25 pounds per acre and the total amount of the application less than 50 pounds per acre.
9. Phosphorous and potassium may be applied for future planned crops. This includes all planned row crop, cool season grass and warm season grass rotations. The nutrient budget must indicate a proper balance of P and K at the end of the soil test cycle.
10. If the soil test indicates a need of 600 or more pounds of ENM per acre, the lime must be applied in the first year to be eligible for payment. If more than 1200 pounds of ENM per acre is required, the lime applications can be split between the 1st and 2nd year of the plan. If less than 600 pounds of ENM per acre is required, the cooperator may elect not to apply it. Fields with only rice grown will not have to apply lime according to soil test.
11. A nutrient budget report shall be developed in Manure Management Planner and specify all sources, amount, timing, and method of application for all nutrients both commercial and manure or organic by-products required by the Nutrient Management Standard (590).
12. May be used in conjunction with N595 Pest Management and with the seeding practices of DSL-01 Permanent Vegetative Cover Establishment, DSL-02 Permanent Vegetative Cover Improvement, DSP-02 Permanent Vegetative Cover Enhancement, or DSP 3.5 Grazing System Seed beginning one year after contract payment of the seeding practice.
13. The nutrient management plan for a particular field must be followed in consecutive years.
14. ***Cost-share is authorized for:***
  - a. Incentive payments, following one complete growing season where the operator (including landowner-operators) can produce documentation that the nutrients were applied in accordance with the nutrient management plan and the crop nutrient withdrawals are based on the crop/forage yields.
15. ***Cost-share is not authorized for:***
  - a. Reimbursement for soil testing as a stand alone component.

#### **Maximum State Cost-Share**

1. Incentive Payment
  - a. Not to exceed \$20.00 per acre per year for new contracts approved after January 1, 2011.
  - b. Operators are eligible to receive a lifetime maximum of \$10,000 from the N590 Nutrient Management practice. District boards should consider limiting operators to participation for multiple years. The definition of operator for the purpose of this practice is any individual farming the land (listed as the operator in the FSA office) and incurring the expense if pesticides need to be applied.
2. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage treated by nutrients.

**Extent Installed**

Acres.

**Maintenance Life**

This practice is completed upon contract payment therefore the contract will not have a maintenance life.

## ***N595      Pest Management***

### **Purpose**

To minimize entry of chemical contaminants to ground and surface water by following a pest management plan. The pest management plan will assist the operator in determining whether, when, and how an application of pesticides (herbicide, fungicide, insecticide) should occur for the crop. The definition of operator for the purpose of this practice is any individual farming the land that incurred the farm operating expenditures. The operator's name should also be listed on file with FSA as the operator of such land. The contract must contain the name of the legal owner. If an operator is participating, the landowner must complete a "Operator Authorization" form.

### **Applicability**

Applies to cropland/hay land/pastureland where pesticides have been inappropriately managed.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

1. The completed practice must meet NRCS Standards and Specifications for the Integrated Pest Management (595) contained in the Field Office Technical Guide.
2. Items for Contract Payment
  - a. Receipts for the pesticide applied. The corresponding field numbers must be shown on the receipts.
  - b. A record of scouting dates and times, treatment application rates, dates and times for each field under contract.

### **Policies**

1. Contracts must be board approved between January 1- April 15, prior to application of any treatments. Contract payments can be issued after October 31.
2. Spraying of fence rows is not eligible for payment.
3. All acres of the field included in the pest management plan are eligible for incentive when spot treatments are applied on at least 75% of the field.
4. A pesticide application on the crop/forage must be planned in order to qualify for the Pest Management incentive. Biological controls are not considered pesticide treatments.
5. N590 Nutrient Management and N595 Pest Management can be utilized on the same fields in the same year.

6. ***Cropland – \*A crop needs to be planted to participate in this incentive.***

- a. As a minimum, crop scouting will require field visits and written reports by a trained individual (preferably a Certified Crop Advisor, CCA) during critical periods such as pre-plant, post-plant, mid-season, high risk pest infestation periods, and post-season. ALL crop fields receiving payment must be scouted a minimum of four times.
- b. To be eligible for the pest management incentive, the pest management plan must indicate that a chemical application is planned for the crop or pasture. If proper scouting indicates that an application does not need to be made, the operator is still eligible for the incentive.
- c. Incentive payments are not authorized when only mechanical or biological pest control practices are planned.

7. ***Grassland/Hay Land***

- a. To be eligible for participation in the Pest Management incentive, the Cool Season and Warm Season Grass fields must meet either the Forage Harvest Management (511) or the Prescribed Grazing (528) specification in the FOTG.
- b. A pest (weeds, fungus, insects etc.) inventory from the previous crop should be available before the pest management plan is developed.
- c. May be used in conjunction with a grazing system during the maintenance life of the practice.
- d. A pest inventory must be done pre and post chemical application.

8. ***Cost-share is authorized for:***

- a. Incentive payments, following one complete growing season of an established pest management plan. This period begins with the board approval of the contract and continues through the growing season. For the purpose of cost-share, at a minimum the growing season will encompass the timeframe of April 15 – October 31.

**Example:** A contract must be approved by the board by April 15, and the contract payment cannot be approved prior to October 31 of the same calendar year.

9. ***Cost-share is not authorized for:***

- a. Utilization of any cost-share program to re-establish legumes in cool season or warm season grass fields receiving the pest management incentive. The operator should be informed that he or she would incur the entire expense to reestablish legumes in their cool season or warm season grass stands.

**Maximum State Cost-Share**

1. Incentive Payments

- a. Not to exceed \$10.00 per acre per year. The lifetime maximum an operator can receive from this practice is \$5,000.
- b. The operator does not have to participate in consecutive years. District boards should consider limiting operators to participation for multiple years. The definition of operator

for the purpose of this practice is any individual farming the land (listed as the operator in the FSA office) and incurring the expense if pesticides need to be applied.

2. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage treated by the pest management plan.

### **Extent Installed**

Acres.

### **Maintenance Life**

This practice is completed upon contract payment therefore will not have a maintenance life.

## ***N380 Windbreak/Shelterbelt Establishment***

### **Purpose**

1. Reduce soil erosion from wind.
2. Improve irrigation efficiency.

### **Applicability**

1. **Limited to Butler, Scott, Stoddard, Mississippi, New Madrid, Dunklin, and Pemiscot counties.**
2. Applies to areas where linear plantings of woody plants are desired and suited for controlling wind erosion.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Windbreak/Shelterbelt Establishment (380) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. A one time incentive per linear foot of established buffer length.

### **Maximum State Cost-Share**

Incentive can not exceed \$1.50 per linear foot of established buffer length.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage of tree/shrub plantation.

### **Extent Installed**

Linear Feet.

### **Maintenance Life**

10 years.



## **N386      *Field Border***

### **Purpose**

1. To protect soil and water quality.
2. Reduce erosion from wind and water.

### **Applicability**

Applies around the perimeter of fields; can support or connect other buffer practices within and between fields.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Field Border (386), and Forage Harvest Management (511) contained in the Field Office Technical Guide.

### **Policies**

1. Only the acreage converted from cropland to permanent vegetative cover is eligible for the out of production incentive for this practice.
2. The field borders can be hayed or mowed according to the Forage Harvest Management (511) standard. Limited grazing is allowed as incidental use when crop field residue is being grazed after harvest.
3. Land coming out of CRP would not qualify for the incentive.
4. When field slope exceeds five percent, end rows shall be eliminated and crops shall be planted on the contour.
5. The maximum width for the incentive is 60 feet; minimum width is 30 feet. In areas where the field exceeds 60 feet, the incentive rate will be based on 60 feet.
6. The field border cannot encompass more than 25% of the entire acreage contained in the applied field.
7. Field borders can be utilized for minimal equipment use when conditions allow.
8. ***Cost-share is authorized for:***
  - a. A one time out of production incentive.
  - b. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
  - c. Fields that currently contain small grain/ row crops are eligible to have a field border established.

**Maximum State Cost-Share**

1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost.
2. A one time out of production incentive can not exceed \$600 per acre.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage of drainage.

**Extent Installed**

Acres planted.

**Maintenance Life**

10 years.

## **N393      *Filter Strip***

### **Purpose**

1. To reduce suspended solids and associated contaminants in runoff.
2. To reduce dissolved contaminants loadings in runoff.

### **Applicability**

Applies to areas situated below cropland, hay land, or grazing land where sediment, nutrients, pesticides, and animal waste may leave these areas and enter environmentally sensitive areas.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Fence (382), Filter Strip (393), Access Control (472), and Forage and Biomass Harvest Management (511) contained in the Field Office Technical Guide.

### **Policies**

1. Only the acreage converted from cropland to permanent vegetative cover is eligible for the out of production incentive for this practice.
2. Filter strips a minimum of 25 feet wide. Assistance may be received on a maximum width of 100 feet.
3. ***Cost-share is authorized for:***
  - a. A one time out of production incentive.
  - b. Exclusion fence.
  - c. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
4. ***Cost-share is not authorized for:***
  - a. Filter strips that are remnants of what was previously meadow.
  - b. Field borders or turn-rows that do not function down slope from tilled cropland. Field borders or turn-rows may be established under N386 Field Border.

### **Maximum State Cost-Share**

1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost.
2. A one time out of production incentive can not exceed \$1,000 per acre for filter strips managed according to Forest Harvest Management (511).

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acres.

**Extent Installed**

Acreage of incentive.

**Maintenance Life**

5 years.

## ***N391 Riparian Forest Buffer***

### **Purpose**

1. Reduce excess amounts of sediment, organic material, nutrients and pesticides in surface runoff, and reduce excess nutrients and other chemicals in shallow ground water flow with a secondary benefit of streambank stabilization.
2. Reduce pesticide drift entering the water body.

### **Applicability**

Applies to areas adjacent to permanent or intermittent streams, public drinking water reservoirs and natural wetlands. Assistance for excluding ponds is not applicable.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Fence (382), Riparian Forest Buffer (391), Access Control (472), Tree/Shrub Site Preparation (490), Stream Crossing (578), Tree/Shrub Establishment (612), Watering Facility (614), and Water Well (642) contained in the Field Office Technical Guide.

### **Policies**

1. Maximum width for incentive is 180 feet. In the Missouri and Mississippi Floodplain the maximum width for incentive is 300 feet.
2. Tree plantation is required.
3. ***Cost-share is authorized for:***
  - a. **Water Source**

Development of a watering source(s) for livestock when the stream is fenced to exclude livestock. More than one watering source may be developed on farms where pipeline and trenching costs would exceed \$3,500.00, or when crossing roads or streams with pipeline is not recommended. Development of watering sources may not exceed \$3,500.00 each for a pond, or well. Designated stream crossings for livestock are authorized. All water supplies should be a minimum of 25 feet from the exclusion fence and a minimum of 100 feet from the high bank of the stream.

    - 1) Pond(s). This may include placement of a water line through an impoundment dam of an existing pond or reconstruction of ponds that no longer provide adequate livestock water.
    - 2) Well(s). The following are procedures and guidelines that must be followed if a well(s) is to be constructed:
      - a) The components that will be allowed under each well construction are limited to \$3,500, which include the well drilling, casing, grout, liner, electrical lines from

the pump control box to the pump, and miscellaneous well components. Miscellaneous well components include the well cap, drive shoe, inverted bell, cement, fittings, and seals for the well itself.

- b) All wells must be constructed and registered according to state requirements. Any type of state certification fee is not eligible for cost-share.
  - c) Tanks are limited to the fields adjacent to the stream.
  - b. Limited access. If it is the least cost alternative, limited access may be authorized to allow controlled access to a stream or pond.
  - c. Exclusion fence.
  - d. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
4. ***Cost-share is not authorized for:***
- a. Spring development. Spring development must be completed under the N574 Spring Development practice.

#### **Maximum State Cost-Share**

1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost.
2. A one time out of production incentive can not exceed \$1,200 per acre.

#### **Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Existing Fence
  - Location of Power Source
  - Planned Pipeline
  - Planned Water Source
  - Planned Watering Facility (Specify Tank or Hydrant)
  - Any other feature that may affect the practice
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

#### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

#### **Acres Served**

Acreage for which the incentive was paid.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## **WQ10      *Stream Protection***

### **Purpose**

Reduce excess amounts of sediment, organic material, nutrients, and pesticides in surface runoff; and reduce excess nutrients and other chemicals in shallow groundwater flow, with a secondary benefit of streambank stabilization.

### **Applicability**

Applies to areas immediately adjacent to permanent, losing, or intermittent streams that have a defined stream bed where livestock have uncontrolled access for watering purposes.

### **Erosion Requirements**

This practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Pond (378), Fence (382), Access Control (472), Pipeline (516), Stream Crossing (578), Watering Facility (614), and Water Well (642) contained in the Field Office Technical Guide.

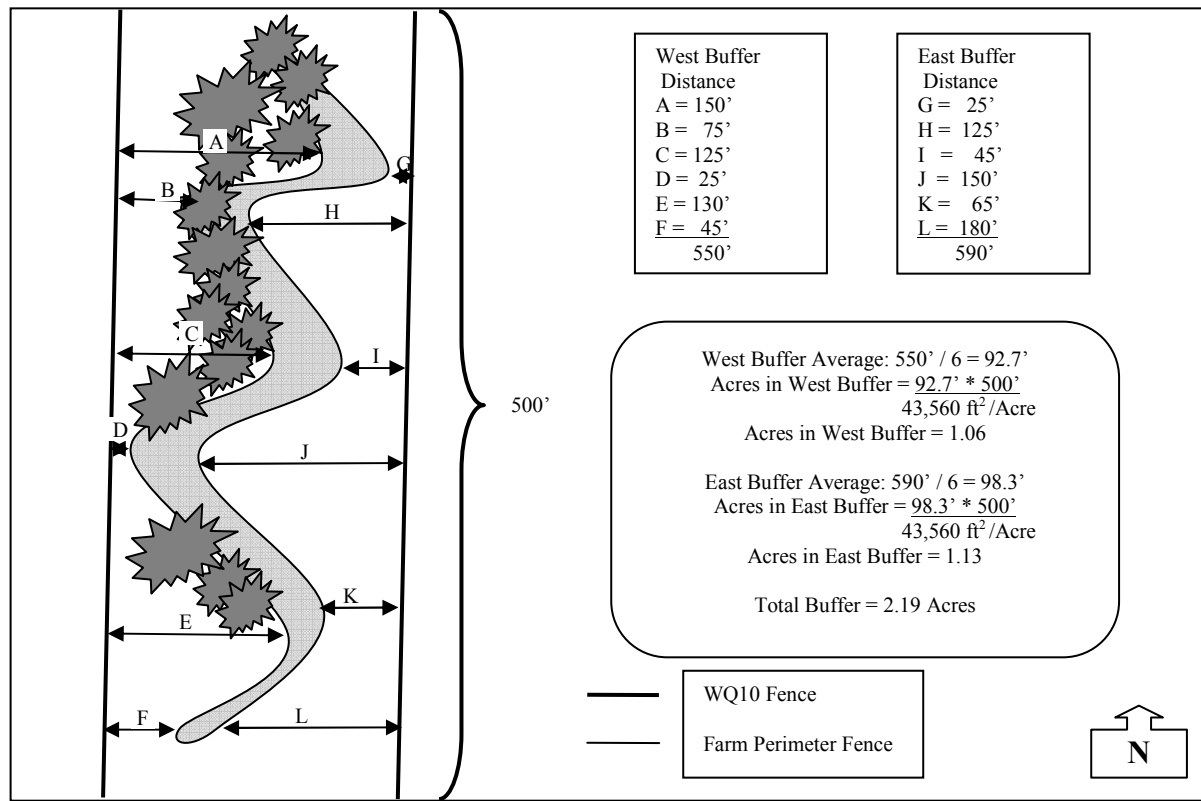
***The Soil and Water Conservation Program strongly encourages the construction of High-Tensile Electric (HTE) exclusionary fence due to the flood prone nature of this practice's applicable location(s).***

### **Policies**

1. The area where the practice will be applied must currently have evidence of livestock presence to qualify.
2. The area excluded must have an adequate boundary fence or natural barrier preventing livestock from accessing the stream prior to installing exclusion fence and must be noted in MOSWIMS.
3. A one time, out of production incentive for livestock exclusion is available for landowners who allow the riparian area to regenerate naturally or maintain it as a conservation buffer. Buffer acres are measured from the high-flow bank of the qualifying stream to the completed fence using the measurement criteria in 3a and 3b of this section.
  - a. Excluded area on each side of the qualifying stream must be a minimum of 25 feet. The incentive may be paid up to a maximum of a 150 foot average from the high bank. Incentive is available for both sides of the qualifying streams.
  - b. The maximum area on which the incentive may be paid cannot exceed a 150 foot average, with 180 feet as the maximum allowed in the averaging calculation (See Figure 1).



**Figure 1**



4. Both sides of the qualifying stream must be excluded from livestock access.
5. The excluded area may be flash grazed beginning one year after contract payment. Livestock access to the excluded area outside of the approved dates is a violation of the maintenance agreement, except for designated stream crossing points.
6. Grazing should not occur under wet weather conditions to prevent manure from being carried to the streams by runoff or floodwaters.
  - a. Cool-season grasses (CSG) may be grazed for a single three (3) day period between April 15th and May 7th, and again for a single three (3) day period between September 1st and October 1st. The average minimum grazing height is six (6) inches for CSG. Strip grazing of the excluded area using temporary fence may be utilized during the above spring and fall periods as long as livestock graze each strip only one time for 3 or fewer days, and maintain a 6 inch average minimum grazing height.
  - b. Warm-season grasses (WSG) may be grazed for a single three (3) day period between July 15th and August 15th. The average minimum grazing height is eight (8) inches for WSG. Strip grazing as indicated above may also be carried out for WSG.
  - c. Grazing dates may be restricted further due to establishment of a planted buffer. Consideration should be given to wildlife when flash grazing is practiced.
  - d. Livestock stocking rates should be reevaluated based on the grazing area that remains after exclusion of the riparian area. The upland acres remaining will be under greater

grazing pressure. Reducing livestock numbers, and/or implementation of a grazing system is recommended to prevent upland erosion.

7. Spraying is allowed to control noxious weeds: along fence lines for maintenance purposes and for suppression of fescue and/or weeds in a WSG or tree/shrub planting for erosion control or wildlife benefit. Prescribed burning of WSG stands is an allowed maintenance practice. Chemicals utilized for maintenance are not eligible for cost-share.
8. Mowing within the buffer incentive area is prohibited except for fence maintenance and should be limited to a single swath along the fence.

9. **Cost-share is authorized for:**

a. Water Source

Development of a watering source(s) for livestock when the qualifying stream is fenced to exclude livestock. More than one watering source may be developed on farms where pipeline and trenching costs would exceed \$3,500; or when crossing roads or streams with pipeline is not recommended. Development of watering sources may not exceed \$3,500 each for a pond or a well. Designated stream crossings for livestock are authorized. All water supplies should be a minimum of 25 feet from the exclusion fence and a minimum of 100 feet from the high bank of the qualifying stream.

- 1) Pond(s). This may include placement of a water line through an impoundment dam of an existing pond or reconstruction of ponds that no longer provide adequate livestock water.
- 2) Well(s). The following are procedures and guidelines that must be followed if a new or existing well is to be used for livestock watering purposes:
  - a) The cost of components allowed for the upgrade and use of an existing well or construction of each new well is limited to \$3,500, which include(s) the well drilling, casing, grout, liner, electrical lines from the pump control box to the pump, and miscellaneous well components. Miscellaneous well components include the well cap, drive shoe, inverted bell, cement, fittings, and seals for the well itself.
  - b) All wells must be constructed or upgraded and registered according to state requirements. Any certification fees are not eligible for cost-share.

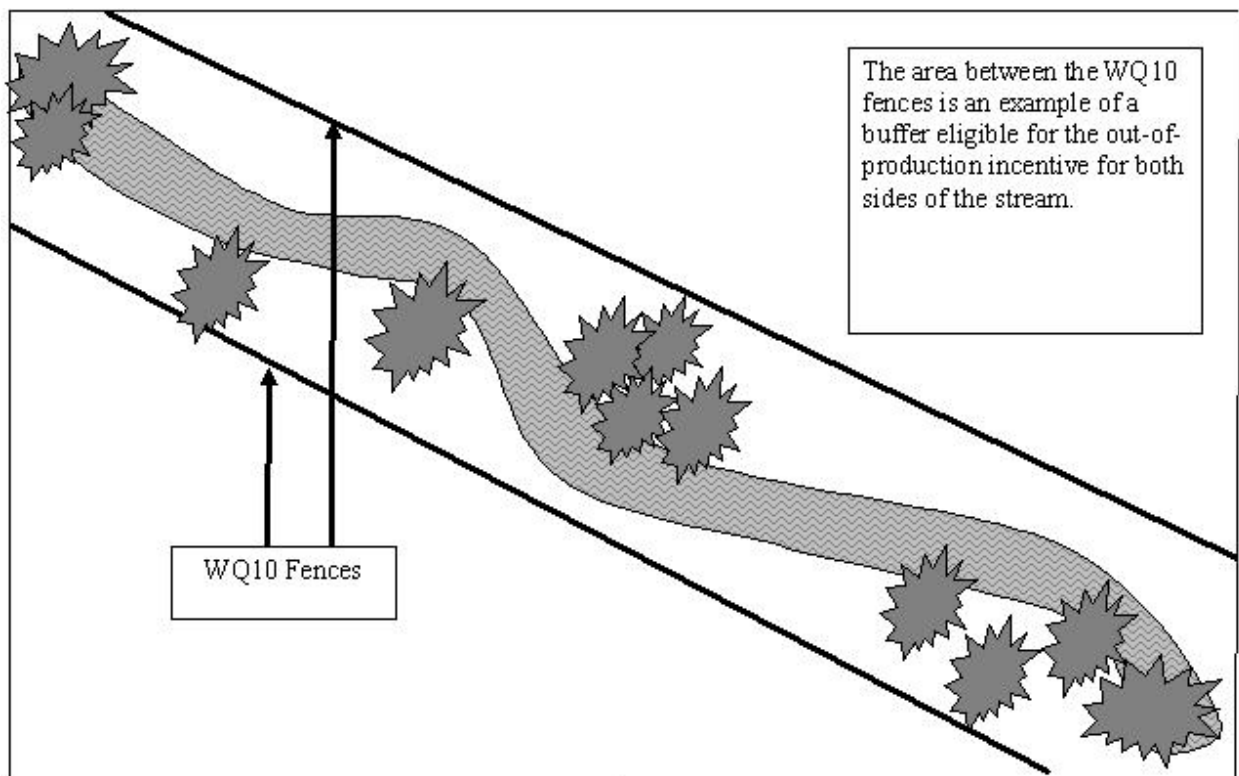
b. Permanent Water Distribution

- 1) Standard cost-share reimbursement applies for the pipeline from existing/new well(s) and ponds to the tank(s).
- 2) Tanks are limited to one per field adjacent to the qualifying stream excluded by the WQ10 practice.

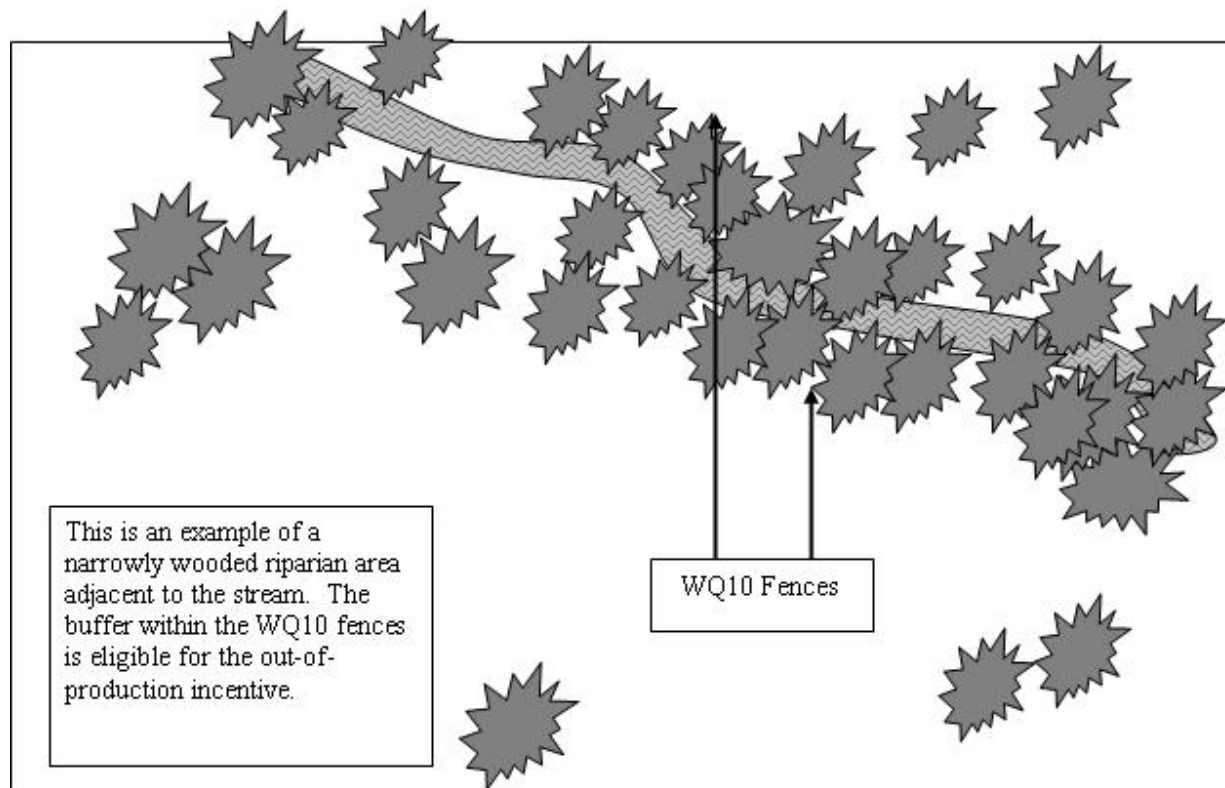
- c. Limited access. If deemed the least cost alternative, a limited access area may be authorized to allow controlled access to a qualifying stream or pond.
- d. Stream crossing(s).
- e. Exclusion fence.

- f. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
- g. Buffer Exclusion – Out of Production
  - 1) Grazable grassland areas adjacent to the qualifying stream and within the buffer area are eligible for the out of production incentive (See Figure 2).
  - 2) Grassland fields and a narrowly wooded riparian corridor adjacent to the excluded qualifying stream are eligible for the incentive (See Figure 3).
  - 3) Incentives are not authorized for stream segments within heavily wooded areas that exceed ten acres (See Figure 4). Heavily wooded areas that exceed ten acres should be evaluated for a use exclusion practice, such as the DFR-05 Woodland Protection through Livestock Exclusion or N472 Use Exclusion.
  - 4) Incentives CANNOT be used in conjunction with other incentive practices for the same fenced area. The least-cost practice ONLY should be utilized. (i.e. N472 fencing of an area that includes a stream may not receive the WQ10 out of production incentive *and* the N472 livestock exclusion incentive, or vice-versa.)

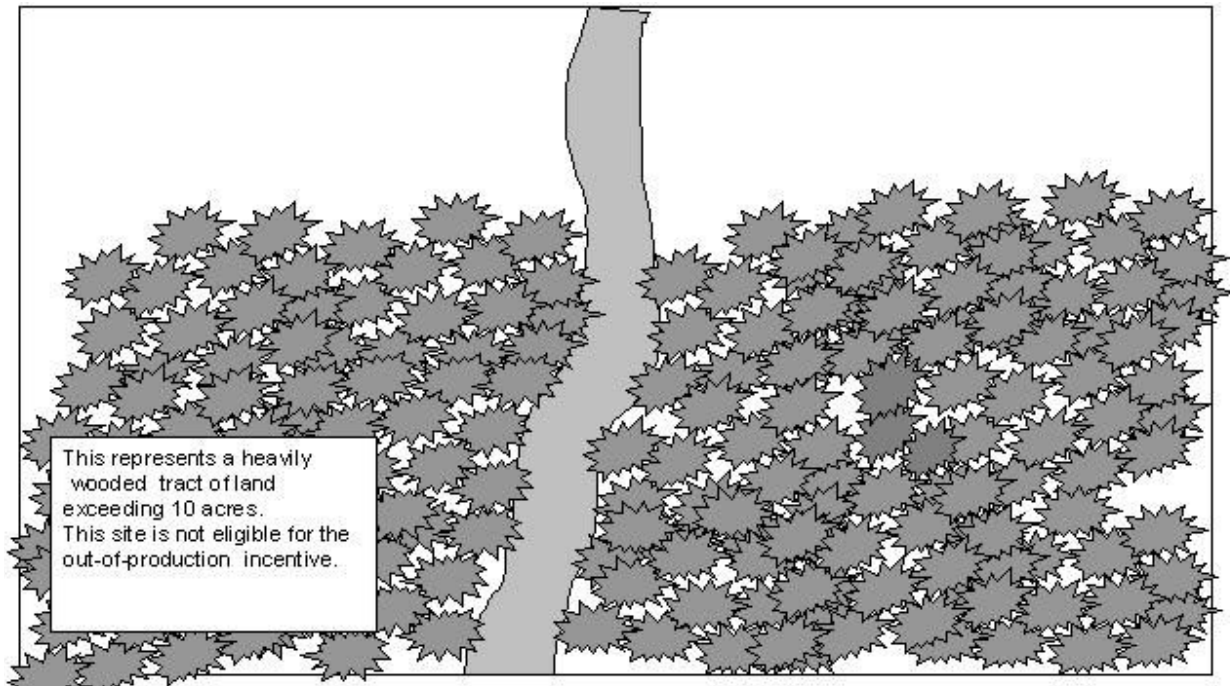
**Figure 2**



**Figure 3**



**Figure 4**



**10. Cost-share is not authorized for:**

- a. Spring Development. Cost-share is authorized under the N574 Spring Development practice.
- b. Exclusion costs for fields dedicated to the harvest of crops or forage production.
- c. Reconstruction: The Soil and Water Conservation Program will not pay for the rebuilding of fence. High Tensile Electric (HTE) is recommended to lower the landowner's costs if a rebuild is necessary.

**Maximum State Cost-Share**

1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost. Each watering source is limited to \$3,500.00.
2. The out of production incentive cannot exceed \$500.00 per acre of buffer exclusion, as described in 9.g.

**Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Location of Power Source
  - Area Treated with Practice
  - Any other feature that may affect the completed practice.

- a. Planned items must be shown and labeled with the fiscal year to be installed.
    - Planned Fence
    - Planned Pipeline
    - Planned Water Source
    - Planned Watering Facility (Specify Tank or Hydrant)
  - b. Existing items must be labeled with the fiscal year installed and funding source (EQIP, SWCP, etc.).
    - Existing Fence, including existing perimeter and cross fences
    - Existing Pipeline
    - Existing Water Source
    - Existing Watering Facility (Specify Tank or Hydrant)
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for the design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy. A certified Technician II can design and certify this practice; however, if a pond is installed, the practice must be certified and contract signed by NRCS staff.

**Acres Served**

Acreage on which the incentive was paid.

**Extent Installed**

Linear Feet of the stream excluded.

**Maintenance Life**

10 years.

## ***C650 Streambank Stabilization***

### **Purpose**

1. Protect streambanks from accelerated erosion.
2. Provide adequate streambank vegetation.
3. Improve water quality.

### **Applicability**

1. Applies to agricultural land along streams where significant streambank erosion problems exist.
2. A district must work with MDC and NRCS staff to determine eligibility and whether technical assistance can be provided. NRCS is able to offer technical assistance in federally funded partnership projects. MDC is able to offer technical assistance within priority watersheds.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet MDC Policies and Procedures for MDC 650 Streambank restoration if MDC staff is the technical authority; and NRCS Standards and Specifications for Fence (382), Access Control (472), Tree/Shrub Site Preparation (490), Streambank and Shoreline Protection (580), and Tree/Shrub Establishment (612) contained in the Field Office Technical Guide.

### **Policies**

1. Plantings will be protected from fire and livestock throughout the life of the practice.
2. Stabilization structures will remain in place until sufficient vegetation is present to sustain bank stability. This will be determined by MDC or NRCS technical staff. Cost-share for reconstruction will not be available.
3. ***Cost-share is authorized for:***
  - a. Components necessary for cedar tree revetments, rock riprap, and bioengineering materials.
  - b. Seedling or other plantings needed to stabilize the constructed area.
  - c. Exclusion fence. Corridor width must be a minimum distance of 50 feet from the top of the streambank.
4. ***Cost-share is not authorized for:***
  - a. Any stream with substantial watershed or in-channel problems, such as channelization or excessive streambank erosion.

- b. Planting of trees for commercial production.
- c. Fence that does not serve the purpose of excluding livestock, such as property lines, rights-of-way, or farm road boundaries.
- d. Clearing of rocks or other obstructions from the areas to be treated.
- e. Labor, material, and equipment supplied at no charge by any agency or organization.

**Maximum State Cost-Share**

- 1. Not to exceed \$5,000.00 per landowner and/or farm.
- 2. Utilize the Practice Limits Detail Report in MoSWIMS to ensure compliance with applicable maximums.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

MDC or NRCS technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Linear Feet excluded on each side of the stream.

**Maintenance Life**

10 years.



## ***N574 Spring Development***

### **Purpose**

Protect and enhance water quality through proper collection and distribution of the ground water resource.

### **Applicability**

Practice applies where livestock have free access to a spring or seep and the development will provide a dependable supply of suitable water for distribution.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Fence (382), Access Control (472), Pipeline (516), Spring Development (574), and Watering Facility (614) contained in the Field Office Technical Guide.

### **Policies**

#### ***1. Cost-share is authorized for:***

- a. Pipe and trenching, from the collection point to the distribution point including the outlet, not to exceed 300 feet.
- b. One distribution point.
- c. Exclusion fence.
- d. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

#### ***2. Cost-share is not authorized for:***

- a. Pumps or similar devices used for the distribution of water.

### **Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage is equal to zero.

**Extent Installed**

Each.

**Maintenance Life**

10 years.

## ***N351 Well Decommissioning***

### **Purpose**

1. Prevent entry of vermin, debris, fertilizer, pesticides or other foreign substances into the well or well bore hole.
2. Prevent entry of contaminated surface water to ground water.

### **Applicability**

1. Applies to any drilled, dug, driven, bored, or otherwise constructed vertical water well subject to agricultural nonpoint source contamination.
2. Not applicable to wells that were used for waste disposal, or if evidence of contamination still exists. Sampling of the fluids in the well may be required.
3. Not applicable to wells that contain contaminant levels that exceed state or federal water quality standards.
4. Treatment of contamination source(s) is required before a well is decommissioned.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Well Decommissioning (351) contained in the Field Office Technical Guide.

### **Policies**

1. The cooperator must record the decommissioned well with the Department of Resources Water Protection Program, Wellhead Protection Section by submitting the "Abandonment Registration Record." Contact the Wellhead Protection Section for more information concerning registration procedures.
2. ***Cost-share is authorized for:***
  - a. Incentive for the decommissioned well.
3. ***Cost-share is not authorized for:***
  - a. Cisterns.

### **Maximum State Cost-Share**

Incentive can not exceed \$400.00 per decommissioned well.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Each.

**Maintenance Life**

10 years.

## ***N725 Sinkhole Treatment***

### **Purpose**

1. Improve quality of recharge waters entering the groundwater system.
2. Improve chemical and nutrient management within sinkhole watersheds.
3. Reduce soil erosion within sinkhole watersheds.

### **Applicability**

Practice applies where karst features (sinkholes) are present which exhibit the potential to deliver surface water pollutants or contaminants to the groundwater system.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Fence (382) and Access Control (472) contained in the Field Office Technical Guide.

### **Policies**

1. Livestock will be excluded from the designated area.
2. *Cost-share is authorized for:*
  - a. Exclusion fence.
  - b. A one time out of production incentive.

### **Maximum State Cost-Share**

1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost.
2. Incentive can not exceed \$300.00 per acre, with a limit of \$1,200 per sinkhole.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage is equal to zero.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***DSP-31 Sinkhole Improvement***

### **Purpose**

Prevent or reduce erosion and prevent or reduce pollution of the land or water from agricultural or silvicultural nonpoint sources.

### **Applicability**

1. **Limited to Cape Girardeau, Perry, and Ste. Genevieve counties.**
2. Applies to specific problem areas on farms where runoff to sinkholes causes gully erosion and carries substantial amounts of sediment or runoff containing pesticides or nutrients, which constitute a significant pollution hazard.
3. According to the Geological Survey and Resource Assessment Division, the drainage modifications must not overwhelm the karst drainage system; and the use of the practice should be limited to sinkholes having chronic drainage problems that cannot be alleviated by other reasonable alternatives. Storm water drains or drainage wells should be kept as shallow as possible. They should serve to enhance entry of storm water into the caves, conduits or other openings that the sinkholes would ordinarily drain into even if the drainage structures were not used. Drains or drainage wells should not penetrate bedrock any appreciable depth and should not be used to drain storm water into zones deeper than the shallow karst drainage system.

### **Erosion Requirements**

Practice is eligible for cost-share based on gully erosion. Post-installation erosion rates must be less than pre-installation erosion rates.

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Filter Strip (393), and Vertical Drain (630) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. Crevice-type sinkholes compatible with the proposed structures.
  - b. Active gullies with an annual erosion rate of 10 tons or more.
  - c. Sinkhole structures part of an approved conservation plan that addresses the entire sinkhole area.
  - d. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

2. *Cost-share is not authorized for:*

- a. Sinkholes utilized as garbage dumps or to dispose of other wastes and contaminants.
- b. Sites that receive runoff contaminated by animal waste from lots or buildings.
- c. Vertical drains that would cause a change in water delivery, such as blocking a sinkhole and delivering runoff to a second sinkhole.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Drainage Acres.

**Extent Installed**

Cubic Yards.

**Maintenance Life**

10 years.



## ***BDSP-31 Buffer Sinkhole Improvement***

### **Purpose**

Provide an incentive to be used for continuing protection of sinkholes that have been stabilized using the DSP-31 Sinkhole Improvement to Control Gully Erosion practice.

### **Applicability**

1. **Limited to Cape Girardeau, Perry and Ste. Genevieve counties.**
2. Applies to specific problem areas where a buffer needs to be maintained to prevent serious impacts to sinkholes and groundwater quality. This practice will ensure that threatened and endangered species and karst cave systems are not adversely impacted by agricultural activity.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Filter Strip (393) contained in the Field Office Technical Guide.

### **Policies**

1. A one time incentive per sinkhole to re-establish or maintain the minimum 25 foot buffer surrounding the DSP-31 Sinkhole Improvement practice not under a current maintenance agreement.
2. The original contract number needs to be included in the “Original Contract” field in MoSWIMS.

### **Maximum State Cost-Share**

Incentive can not exceed \$300.00 per sinkhole.

### **Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage is equal to zero.

**Extent Installed**

Each.

**Maintenance Life**

10 years.

## ***DFR-04 Forest Plantation***

### **Purpose**

1. Protect the soil.
2. Encourage the conversion of marginal soils to less intensive use.
3. Soil erosion from agricultural sources.
4. Improve water quality.

### **Applicability**

Applies to land to be converted to woodland.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Fence (382), Access Control (472), Tree/Shrub Preparation (490), and Tree/Shrub Establishment (612) contained in the Field Office Technical Guide.

### **Policies**

1. ***Cost-share is authorized for:***
  - a. Tree plantation.
  - b. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.
  - c. Exclusion fence that lies within an existing functional interior or property line fence.
2. ***Cost-share is not authorized for:***
  - a. Site preparation used to clear or remove undesirable tree species so that desirable species can be planted.
  - b. Planting of trees for commercial production.
  - c. Fence that does not serve the purpose of excluding livestock, such as property lines, rights-of-way, or farm road boundaries.
  - d. Bringing electrical power to the site.
  - e. Clearing of rocks or other obstructions from the area.
  - f. Planting materials and/or equipment supplied at no charge by any agency or organization.
  - g. Reforestation on land where timber has been harvested.
  - h. Planting less than one acre.

**Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

**Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Existing Fence
  - Planned Fence
  - Acres treated with practice.
  - Any other feature that may affect the practice.
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage of tree plantation.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***DFR-05 Woodland Protection through Livestock Exclusion***

### **Purpose**

Protect soil and plant resources from grazing by livestock.

### **Applicability**

Applies to existing woodland areas susceptible to excessive erosion due to livestock grazing.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Fence (382) and Access Control (472) contained in the Field Office Technical Guide.

### **Policies**

1. The area to be excluded will be protected from fire and grazing for the lifespan of the practice.
2. The area where the practice will be installed must currently have livestock to qualify.
3. The area excluded must have adequate boundary fence prior to installing exclusion fence.
4. ***Cost-share is authorized for:***
  - a. Exclusion fence that lies within an existing functional interior or property line fence.
5. ***Cost-share is not authorized for:***
  - a. Fence that does not serve the purpose of excluding livestock, such as property lines, rights-of-way, or farm road boundaries.
  - b. Bringing electrical power to the site.
  - c. Clearing of rocks or other obstructions from the area.
  - d. Tree plantation.

### **Maximum State Cost-Share**

Assistance is limited to 75% of the county average cost, not to exceed the state average cost.

### **Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Existing Fence
  - Planned Fence
  - Acres treated with practice.
  - Any other feature that may affect the practice.

2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage excluded from livestock.

**Extent Installed**

Linear Feet.

**Maintenance Life**

10 years.

## ***N472 Use Exclusion***

### **Purpose**

Protect soil and plant resources from grazing by livestock.

### **Applicability**

Applies to areas where vegetative establishment, soil condition, and water quality are in need of protection.

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Fence (382) and Access Control (472) contained in the Field Office Technical Guide.

### **Policies**

1. The area where the practice will be applied must currently have livestock to qualify.
2. The area excluded must have adequate boundary fence prior to installing exclusion fence.
3. ***Cost-share is authorized for:***
  - a. A one time incentive for the area excluded.
  - b. Exclusion fence.
  - c. Exclusion of an existing pond.
4. ***Cost-share is not authorized for:***
  - a. Fence that does not serve the purpose of excluding livestock, such as property lines, rights-of-way, or farm road boundaries.
  - b. Bringing electrical power to the site.
  - c. Clearing of rocks or other obstructions from the area.
  - d. Tree plantation.
  - e. Incentive payment for the same acres receiving N391 Riparian Forest Buffer or WQ10 Stream Protection financial assistance.

### **Maximum State Cost-Share**

1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost.
2. Incentive can not exceed \$5.00 per acre.

### **Map Requirements**

1. A CMT Map Number must be entered in MoSWIMS prior to contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Existing Fence
  - Planned Fence
  - Acres treated with practice.
  - Any other feature that may affect the practice.
2. A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

### **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

### **Acres Served**

Acreage excluded.

### **Extent Installed**

Acres.

### **Maintenance Life**

10 years.



## ***C100 Timber Harvest Plan***

### **Purpose**

Proper design and the implementation of best management practices on logging roads, stream crossings, log landings, and other constructive measures during timber harvest.

### **Applicability**

Applies to land where the cooperator is planning to conduct a timber sale (payment after timber sale).

### **Erosion Requirements**

Practice has no erosion requirements.

### **Specifications**

The completed practice must be certified by MDC staff.

### **Policies**

1. The cooperator will be responsible for insuring implementation as recommended in the harvest plan.
2. Use of equipment or vehicles must be avoided within 100 feet of the top of the streambank in order to protect the riparian area of streams and waterways.
3. The harvest plan should include a map showing approximate locations of the harvest area, stream crossings, forest roads, skid trails and log landings. If a cooperator fails to follow any part of the harvest plan, he or she is not eligible for the incentive.
4. ***Cost-share is authorized for:***
  - a. Landing areas located greater than 200 feet from any stream, pond, lake, sink hole, spring, cave, or wetland.
  - b. Incentive on planned timber harvest acres.
5. ***Cost-share is not authorized for:***
  - a. Timber acres that have been harvested within the past 5 years unless multiple harvests on the same acreage are specified necessary by a professional forester.

### **Maximum State Cost-Share**

1. When the practice is implemented on 20-75 acres, incentives can not exceed \$20 per acre. Payments on 75+ acres will be for \$1,500.00, plus \$15 per acre for tracts over 75 acres.
2. The maximum incentive payment shall not exceed \$3,000.00 per farm or cooperator per year. The cooperator is eligible to receive a total of \$9,000 for this practice.
3. Utilize Practice Limits Detail Report in MoSWIMS to ensure compliance with applicable maximums.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for design of the harvest plan, provides oversight of the plan implementation, and to certify that the completed practice meets harvest plan requirements within commission policy.

**Acres Served**

Acreage harvested.

**Extent Installed**

Acres.

**Maintenance Life**

10 years.

## ***N655 Restoration of Skid Trails, Logging Roads, Stream Crossings, and Log Landings***

### **Purpose**

Non-industrial private forest cooperators for implementing practices for controlling gully erosion on skid trails, logging roads, stream crossings and log landings that have been improperly constructed during a timber harvest.

### **Applicability**

Applies to control or prevent erosion on land with existing tree cover where improper harvest has taken place. The timber harvest that initiated the gully erosion must have occurred prior to contract approval.

### **Erosion Requirements**

Practice is eligible for cost-share based on gully erosion. Post-installation erosion rates must be less than pre-installation erosion rates.

***Gully Erosion Checks:*** PRE-INSTALL > POST-INSTALL

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342) and Forest Trails and Landings (655) contained in the Field Office Technical Guide.

### **Policies**

1. The cooperator should be encouraged to conduct future logging activities through C100 Timber Harvest Plan practice to prevent erosion from improper harvest.
2. ***Cost-share is authorized for:***
  - a. Active gully areas on eroding skid trails, logging roads, stream crossings and log landings.
  - b. One contract per gully treatment area.
  - c. Critical Area Seeding. Permanent vegetative cover based on the Critical Area Seeding component.

### **Maximum State Cost-Share**

1. Incentive payments shall not exceed \$1500 per gully.
2. Cooperators are eligible to receive a maximum of \$6,000 dollars for this practice.
3. Utilize the Practice Limits Detail report in MoSWIMS to ensure compliance with applicable maximums.

**Map Requirements**

A map that displays the completed practice must be scanned and attached as a “Map Document” in MoSWIMS prior to contract payment submission.

**Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

**Acres Served**

Acreage is equal to zero.

**Extent Installed**

Each gully site treated.

**Maintenance Life**

10 years.